

Electrical Merchandising

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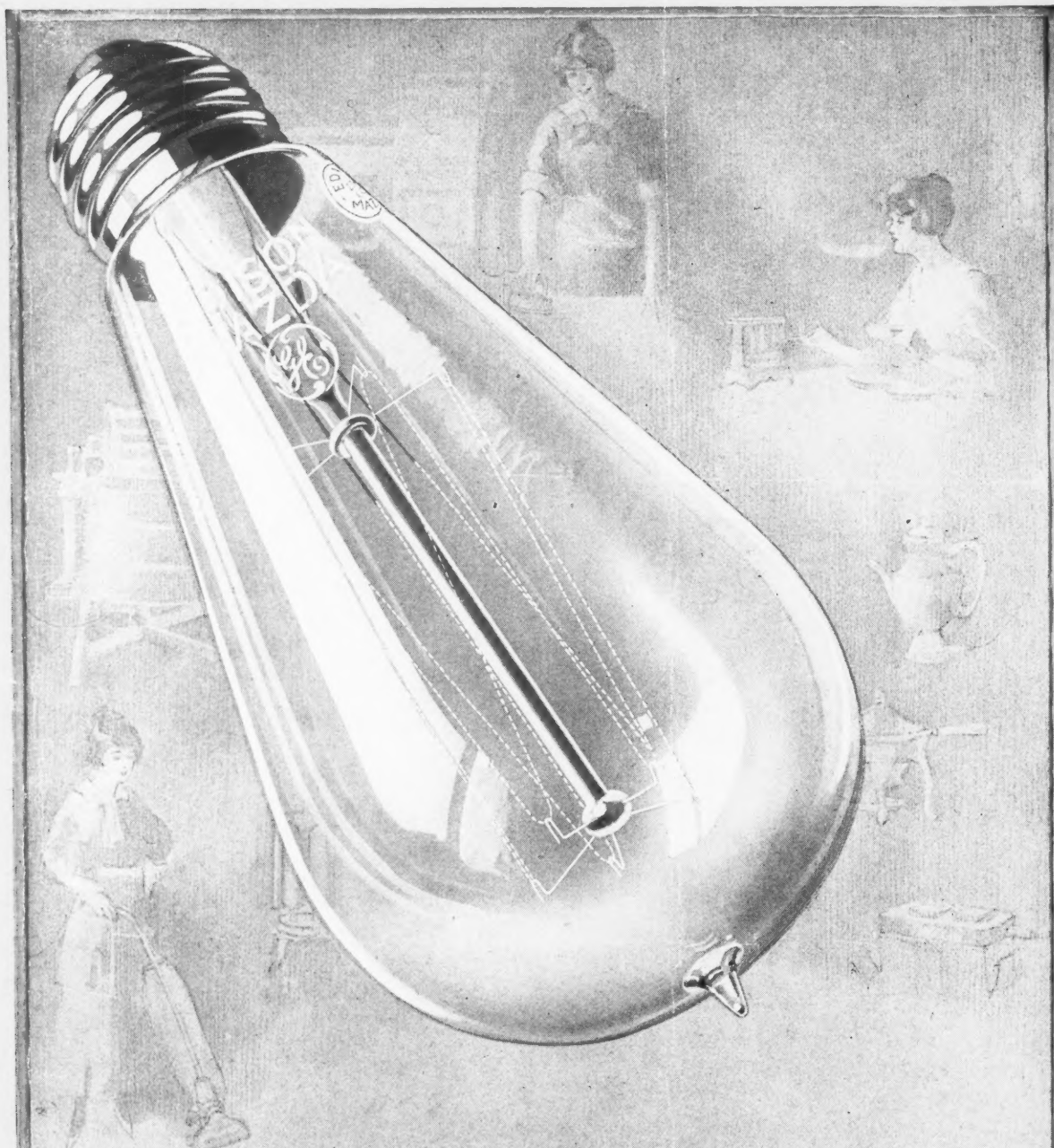
We Are
Selling The
Western Electric
Idea To Your
Customers

Are You
Selling Them
Western Electric
Appliances To

"Lighten the Labor of the Home"

Western Electric Company

INCORPORATED
Offices in all Principal Cities



 The Lamp that Lights the Way to Lighter Housework

That makes electricity do triple duty—that saves two-thirds of your current to operate other electrical household conveniences which will help you solve your servant problem

EDISON MAZDA

BACKED BY MAZDA SERVICE

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Electrical Merchandising

The Monthly Magazine of the Electrical Trade

F. M. FEIKER, Editorial Director

O. H. CALDWELL, Editor

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ON THE WIRE WITH THE EDITORS



"Lighten the Labor of the Home"

ELECTRICAL MERCHANDISING offers to its readers as a central purpose for their fall selling season (reaching through to Christmas) complete campaign ideas and methods for selling electrical appliances to "Lighten the Labor of the Home"—a slogan and a purpose which have brought the hearty commendation of leaders in every branch of the industry.

These campaign articles and ideas, which begin in this (September) issue, will be continued through the October, November and December numbers, finally culminating in a dealer movement to urge the early buying of useful labor-saving electrical gifts this Christmas.

The issue now in the reader's hands pictures the tremendous sales opportunity in this "Lighten the Labor of the Home" movement, points out hundreds of things that every electrical selling man can do to speed the campaign on its way, outlines the helps the manufacturers offer, and in its editorial and advertising pages describes dozens of new and proven appliances to lighten the labor in the household.

Following numbers will outline in detail the organization of a "Lighten the Labor of the Home" campaign in your store and your town, list new applications for well-known appliances, show how to use the manufacturers' booklets and other printed selling helps, report successful "lighten labor" appliance campaigns, tell new ways to save labor with electrical appliances and to tie up with the "Useful Christmas Gift" idea, and continue

to give all the new ideas of the appliance market and the electrical trade that will help the dealer sell.

Are you in line in this campaign to "lighten the labor of the home"?

Something New!—Start Now to Keep Your Own Buying Index of "New Merchandise to Sell"

WITH this issue our regular department, "New Merchandise to Sell and Where to Buy It," appears in a new form which will make it of even greater usefulness than ever to the man who does the buying of electrical merchandise and supplies.

Beginning on page 158, as will be noted, every item, descriptive of new merchandise to sell, is of such size and shape that it can be readily clipped and pasted on a standard 3-in. by 5-in. filing card. With these items assembled by classifications as each new issue of MERCHANDISING brings the latest news of new merchandise to sell, the buyer will always have an up-to-date card index of all the newest things electrical to offer to his customers. This method of presenting new products—which has been patented by the McGraw-Hill Publishing Company, Inc., for use in several of its publications—will be continued in future issues of ELECTRICAL MERCHANDISING, and suggestions that will add to its usefulness will be welcomed.

Start now to keep your own buying index of new merchandise to sell!

JAMES H. MCGRAW,
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ELECTRICAL MERCHANDISING—MEMBER SOCIETY FOR ELECTRICAL DEVELOPMENT, INC.—"DO IT ELECTRICALLY"

**What Leaders in the Industry Say
of Electrical Merchandising's
Campaign to "Lighten the
Labor of the Home"**

GEORGE WILLIAMS

*Commercial Manager H. L. Doherty &
Company, New York*

I think your idea of conducting a popular "Lighten the Labor of the Home" movement at this time is splendid. The top-notch classes of business should be developed through this campaign, and the present condition of labor shortage creates a wonderful opportunity to place domestic electrical equipment.

ERNEST A. EDKINS

*General Manager Electric Shops, Common-
wealth Edison Company, Chicago*

The campaign for boosting the sales of electrical merchandise which you propose to inaugurate is a happy and timely thought. Of course we are all doing this very thing in our respective bailiwicks, but if you can show us how to sell more goods you will be doing the electrical industry a great service.

GEORGE A. HUGHES

*President Hughes Electric Heating
Company, Chicago*

I like the idea, and will aid in extending the use of the slogan in every possible way. "Lighten the Labor of the Home" emphasizes in a few words the point that the electrical industry has been endeavoring to convey to the housewife—that the use of electrical devices will minimize her burden.

WILLIAM L. GOODWIN

*Leader in Dealer-Contractor Co-operative
Movement*

When it is realized that the dealer's annual sales of electrical goods to the average family can well be made to exceed \$20 to \$30 a year, and that sales at this rate can go on year after year without any sign of saturation, the dealer-contractor can begin to form some estimate of the opportunity before him.

NEIL C. HURLEY

President Hurley Machine Company, Chicago

I certainly believe that the slogan you have adopted for all electrical merchants to use between now and Christmas is fine, and we are lining up to make use of the idea in every way.

E. W. LLOYD

*General Contract Agent Commonwealth
Edison Company, Chicago*

I quite agree with your idea of starting a plan to stimulate the sale of electrical merchandise under the slogan "Lighten the Labor of the Home." It is logical in these times, with the high cost of material, to cut central station investments and extensions as low as possible, and to build up, in a legitimate way, business with customers already connected.

P. L. THOMSON

*Advertising Manager Western Electric
Company, New York City*

I like your slogan and I like the idea of the intensive campaign you are planning for home labor-saving helps. Broadly speaking, the public has not been sold on this idea, and before they will be sold there must be a lot of national publicity backed by local publicity and local selling effort.

ARTHUR WILLIAMS

*General Commercial Manager New York
Edison Company, New York City*

To the electrical merchant the placing of appliances in the household offers a wide and rich field,—one that has never yet been made as productive as it should be. It must be developed by educating the public to recognize the added comfort and attractiveness which can be brought into the home by such devices.

J. D. A. CROSS

*Manager Heating Device Sales General
Electric Company, Pittsfield, Mass.*

Your idea of a campaign to "Lighten the Labor of the Home" is an excellent one, and I am very sure that if this slogan is put before the public in connection with electrical appliances, it will greatly aid merchandisers of these appliances in selling them. I am asking our advertising department to use this slogan wherever possible in advertising our appliances.

H. N. McCONNELL

*General Commercial Manager United Gas &
Electric Engineering Corporation, New York*

To my mind you have hit upon a topic that is of vital interest to central stations at this time. What are needed are some good practical hunches without garnishing, and I shall look forward with a great deal of interest to your articles, for I know they will contain valuable material.

Getting a Grip on



THE measure of a man's success lies in his ability to think both straight and far. Rambling thoughts arrive nowhere, nor does the man whose brain is constantly focussed on near-by, trivial things often attain the Big Goal.

The Electrical Industry is great to-day because men of magnificent imagination foresaw its possibilities and shrewdly planned its development.

The Electrical Trade—that is, our system of retail distribution—is weak to-day because men who combine imagination with sound common sense have not as yet given it the serious thought that it deserves. We have, as merchants, allowed our minds to ramble in a narrow circle—we have been concerned with near-by, trivial problems and prospects—we have allowed the thought of an immediate five-cent piece to obscure our vision of the ultimate five-hundred-dollar possibility. The

Lighten the Labor of the Home

campaign which ELECTRICAL MERCHANDISING inaugurates with this issue is a conscious effort to get a grip on a big merchandising idea.

Every electrical contractor in America has, as his prospective customer list, an average of one thousand homes connected to or within reach of electric service. Every such home is a potential buyer of five hundred dollars' worth of electrical appliances and equipment. Here, then, is a maximum of half a million dollars' worth of residential business which every contractor-reader of this magazine should consider as rightfully his.

He can have this business if he will get it—but how?

Certainly not by concentrating upon the immediate nickel.

on the Big Idea

[An Editorial]



THE country is experiencing a tremendous transition. Efficiency and economy in the home are being both preached and practiced, for not only businesses but homes are being reorganized for the conservation of labor and materials.

In industry, labor is at a premium; in homes, servants are at best difficult, in many districts impossible to secure. Men by the hundreds of thousands are being drawn from industry into the war, and a part, at least, of their work must be done by women. Even where the women do not actually go into industry they are concerned with war relief work, with various forms of patriotic service. So the great domestic need of the day is for efficient means and methods of reducing the drudgery of housework.

Electricity solves these problems—the problems of washing, ironing, cooking, dishwashing, sweeping, silver polishing, pumping, all the heavy “chores” of homekeeping. And the

Lighten the Labor of the Home

campaign is devised to promote, not a few of these services, but *all* of them—and not in a few homes, but in *all* homes.

The success of the campaign—*your* success in the campaign—is simply a question of getting a mental grip on the Big Idea, of seeing far ahead, of planning shrewdly your path to the final goal. This success can never be won by the man whose vision stops at the five-cent profit on a single small lamp: it will only be won by the man who can visualize and reach for the ultimate five-hundred-dollar electrical equipment which belongs in every home.

The business is there to be had—the time is right now—the way to get it, we confidently believe, is pointed by ELECTRICAL MERCHANDISING’S campaign to “Lighten the Labor of the Home.”

What Leaders in the Industry Say of Electrical Merchandising’s Campaign to “Lighten the Labor of the Home”

ERNEST FREEMAN

President Freeman-Sweet Company, Chicago

The campaign is a good idea and will prove of much value. The retail end of the contracting business has been overlooked and anything that can stimulate this branch will prove interesting. We wish you success.

HERMAN ANDRAE

President Herman Andrae Electrical Company, Milwaukee, Wis.

Three years of European war have cut off immigration to such an extent that it is now almost impossible to get satisfactory domestic help. This makes the present time particularly right for selling appliances which “Lighten the Labor of the Home” and for equipping thousands of households to help them over the present crisis, besides permanently eliminating much of the drudgery of the home.

COL. ROBLEY S. STEARNES

New Orleans President National Electrical Contractors’ Association

The use of electric appliances serves to lighten the labor as well as add to the comfort of home, more than any other feature. While our minds are engrossed with industrial efficiency, business policies, war problems and other momentous subjects, let us not fail to give attention to every effort that will “Lighten the Labor of the Home.”

G. M. SANBORN

President Sanborn Electric Company, Indianapolis, Ind.

I think your “Lighten the Labor of the Home” campaign is a capital idea, for there is a big opportunity in the home for things electrical.

LOUIS D. GIBBS

Superintendent of Advertising Edison Electric Illuminating Company of Boston

I believe that a campaign along the lines planned by Merchandising will be most timely. To-day isolated plants of manufacturers are throwing up their hands and seeking central-station service because of the high cost of coal, materials and labor. Similar high costs are affecting housekeeping. Why stop the waste in business and let it run on in our homes?

W. H. HODGE

Publicity Manager H. M. Byllesby & Company, Chicago

There has never been a more opportune time for special efforts to place labor-saving appliances in American homes. The servant problem has reached an acute stage. Housewives, as a rule, can afford to pay servants’ wages better than ever before, but now they cannot get the servants. They can and will buy electrical appliances, and now is the time to sell them.

T. B. HATFIELD

President Hatfield Electric Company, Indianapolis, Ind.

We most heartily endorse the “Lighten the Labor of the Home” idea. Naturally such a campaign must be started by the seller and carried through to the buyer, and if proper advice is given concerning how to get to the buyer, through personal contact or advertising mediums, and the whys and wherefores of same, we believe the campaign will be of much benefit to all concerned.

W. H. VILETT

President Sterling Electric Company, Minneapolis, Minn.

If every man who makes a living out of the electrical business would provide his home with just one-half of the electrical appliances that are actually necessary and convenient, what a big business this would be, in itself, and what a tremendous effect it would have on the public. And if we electrical men were using all these things ourselves the public could not help wanting them.

GEORGE WEIDERMAN

Chairman Electrical Merchandising Committee, N. E. C. A.

I believe the campaign for the increased sale of appliances for the home is one that should be heartily endorsed and I hope that you will push it with all speed. I find as Chairman of the Electrical Merchandising Committee, N. E. C. A., that you have a big field with the electrical contractors of the United States for educational work and would recommend that you bring your publication to the attention of its membership in every possible way.

In the "Lighten the Labor of the Home" Campaign

What You Can Do—Why You Should Do It

The Average Family Wants to Lighten Labor in the Home—The Nation Needs This Campaign—Here Is a Business Opportunity That Is a Patriotic Duty

“WHAT am I going to do toward lightening labor in the homes of this town?”

That is the question that each man must ask himself before this big idea of making a campaign in every city through the country can take very definite shape with the individual electrical merchants, with the contractors and with the central station selling men.

“What am I going to do to help my dealer-customers put it over?” is what every manufacturer and jobber will want to know.

And before any man can get a clear view of the opportunity and see just where he ties into the plan, he needs to take a careful look at the two things that have brought it all about—present-day conditions in this country and the way that they affect the average family.

In every household in the land, in every home in every city where electric service is in use to-day or could be installed to-morrow, the public knows that these are war times. The people have been watching through the months, the years, the course of the great European conflict; they have seen our own United States join in and have felt the influence of it all develop in their local lives. They have seen the cost of living increase steadily with the rising price of this and that commodity. They have witnessed the widespread disturbance in the labor market which has lured domestic servants from the kitchen to the factory, until countless housewives have been forced to do their own work for the lack of help that they would gladly hire. To-day the domestic servant is a scarce and uncertain article.

And now the Food Administrator comes and preaches conservation to us all at a time when we are properly receptive to this message that we should have learned long years ago. And then on top of all this sounds the insistent call of wartime charities that need our money and our

work. And what is the result of it all in the average home?

THE FAVORABLE CONDITIONS OF THE TIMES

IN almost every home on every street throughout the land this fall people are trying hard to practice thrift, as they have never thought of it before. They are trying to economize, not in the old-time sense of skimping, but according to the new idea of efficient conservation. They are trying to save waste by buying foods that have the greatest nutriment, the most food value. They are trying to economize in labor by using better methods in their housekeeping—better equipment. They are beginning to appreciate more keenly the value of hours saved from useless household drudgery. They are finding a keener interest in the idea of electrical appliances, for this suggests the possibility of more time freed for Red Cross work or even the elimination of a servant. In other words, the idea of buying for *quality* and *efficiency* has come into our homes just as it has come to be the standard of the business world, and with it opens up a market for electrical appliances that has no limit. This is the trend of thought right now, this week, this month, this autumn—among the people of your town.

For three years and more the gold of all the world has been flowing steadily to this country. Our industries have been working day and night for bumper profits, and pouring back this money to the people through the medium of dividends and wages. We may be in a war, but we are rich and prosperous and spending freely. A billion dollars extra was subscribed to the first Liberty Loan. A hundred million dollars was contributed to the Red Cross in a week. The entire country, in short, is naturally affected by the quick contagion of the bigger ideas that have spread throughout the world in this great epoch. Old stand-

ards have been cast aside. We are thinking, working and spending on a bigger, faster and more effective scale than was ever done before in the world's history. We are adopting, nationally and individually, the policy of getting things done quickly, with a minimum of waste.

And after all, as it affects the home, this is the very principle that electrical men have preached since the perfection of modern household appliances. Slowly and successfully they have been teaching the American housewife that a way has come to lighten the labor in the home by utilizing the electric servant, but it has been an arduous educational process beset with all the barriers of habit and tradition. Then comes the war—and without our realizing what was taking place, this mental attitude has changed. The people to-day are eager for economy through conservation in the home and they realize that the first step is to put an end to old-time drudgeries and lighten labor.

THE MARKET AMONG MEN

THERE is another factor in this opportunity that must be considered also—the fact that appliances will be sold in this campaign on a very different basis, from a different point of view. This is a proposition now that you can take right to the men and sell on a straight business footing instead of as a bit of luxury, an avoidable expense in home equipment. And before this campaign closes, a canvass should be made of every business man.

In the past household appliances have been sold to the housewife in the home. In most cases the conversion of the husband has been left to her. He has not been approached in his office. We have not thought of going to him there on household matters. We have talked to him there about his *business* only, forgetting that this business of his home is just as much his business as the business of his



HERE ARE WAYS TO IMPRESS THE "LIGHTEN-LABOR-IN-THE-HOME" IDEA UPON PASSER-BY AND CUSTOMER

1—A "live" window display always attracts attention, besides actually demonstrating the device as it is used in the home. Note that the display here pictured served also as an "inside" demonstration of the electric sewing machine, being arranged to be visible from within as well as from without.

2—A store demonstration like this can be used to show how a vacuum-cleaner makes "child's-play" of the labor of the home.

3—A "stunt" feature. The placard on the wall tells how "548,000 people walked over this rug" while it was on the sidewalk on a prominent corner of the town—after which it was brought to the electric shop to be vacuum-cleaned "as good as new".

4—If the opportunity is ripe, co-operate with other merchants in a

"Lighten-the-Labor-of-the-Home Show." To the co-operative show at Fort Wayne, Ind., here pictured, 38 dealers contributed exhibits, each marked with the owner's tag. Appliances of a kind were grouped together, except in the reproductions of a living room, dining room, bedroom, laundry and kitchen.

5—Set aside a corner of your store as an "electric kitchen," and show an electric range, dish-washer, refrigerator, food-grinder, drink-mixer, etc., in actual operation.

6—Wax figures add interest to your windows, second only to live models, because such figures show the appliance as if in actual use. Perhaps your friend in the dry-goods business will rent or loan you a wax lady for a few weeks.

office, store or factory. It's time we made him realize it in just this way.

This campaign to lighten labor in the home, therefore, has got to be attacked in a new way. It was *the man* who built that home or purchased it or rented it and had it wired for electric service. He attended to those *business* details, then he turned the household over to his wife to operate. But now you come along with something that is not just operation. It is a *business* proposition calling for investment, the equipment of that home with modern electrical machinery that will improve efficiency in operating methods and bring economy. This is another matter that the man and woman will both look upon as *his*

business and he will act upon it. Ultimately, it is the man that you must see.

WHAT WILL YOU DO?

SO the time has come to take this message to the men in your town and to bring about the adequate equipment of these homes for a business purpose. Now is the time, because right now there is the strong impelling reason that efficiency and labor saving should be practised and improved in every home to serve the nation. To-day the salesman can walk into any man's office on this business and secure attention, for he can convince this man that it is more than just a chance for him to save. It is a

call for him to "Do His Bit" in patriotic conservation.

All this presents an opportunity the like of which this industry of ours has never seen. What will *you* do to make the most of it? How are you going to play your part in the great work?

Here are some definite suggestions that you can put in force to start the movement going in your town. It is your duty and your privilege. Take hold and help to put this campaign over as a great crusade to lighten the labor in the home, supported by the entire electrical industry of the country, and sustained by the force of all that public approval which will soon express itself once you have brought your message to the front.

What to Do in the Electric Shop

Some Suggestions for the Retail Store—No Matter Whether It Belongs to Dealer, Contractor or Central Station

1. Turn your store into a labor-saving display; featuring from that angle the flatiron, vacuum cleaner, washing machine, dish washer, silver polisher, range, bottle warmer, heating pad and all the other heating devices. Work out your window displays to carry this message in every possible way, with demonstrations of the Old way and the New—a point of interest in your store. Note the suggestions on pages 110 and 111.

2. Work up lettered poster cards for your store and windows presenting the arguments for different appliances that offer labor saving, expressed in a few words that the eye can grasp. Secure all kinds of manufacturers' "dealer help" printed matter that plays up the "lighten labor" thought.

3. Get in touch with everybody who can help you put the idea over in a big way. Call on local and near-by manufacturers' and jobbers' representatives for advice and co-operation. Search the magazines for ideas, and don't hesitate to call on ELECTRICAL MERCHANDISING for suggestions and assistance.

4. If the local central station has not already taken the initiative, make this campaign your own and go to work to organize co-operation between the local electrical men. Take the lead and call a meeting. Dine together and sell the idea to contractors and dealers. Appoint a committee to arrange the details of a co-operative campaign. Work in close harmony with your central station.

5. Give the campaign a patriotic flavor, by decorating your building outdoors and in with flags and bunting and signs, both painted and electric, reading—"Lighten the Labor of the Home." Play up this idea throughout your advertising of all kinds. Put flags on your trucks, delivery wagon, etc. Let every employee wear a silk flag on his coat and tell the people why.

6. Send a letter to every customer on your books and tell them all about it. Inclose manufacturers' booklets that tell about "Lighten the Labor" electric helps. Announce a special easy-payment offer on all purchases of household labor-saving appliances during the term of your campaign. Call your customers by 'phone, or have your young-woman shop assistant ring them up and tell them of your special offer. Make a demonstration if the prospect is willing.

7. Arrange with the central station and other stores to make the campaign prices uniform on lines sold by more than one house, and to standardize the easy-payment plan, so that all advertising effort will combine its influence to create business for all.

8. Call all your employees together for an evening meeting just before the campaign starts and sell the Big Idea to them. Offer them commissions on all business they can dig up and bring in, with prizes for the men who make the biggest showing.

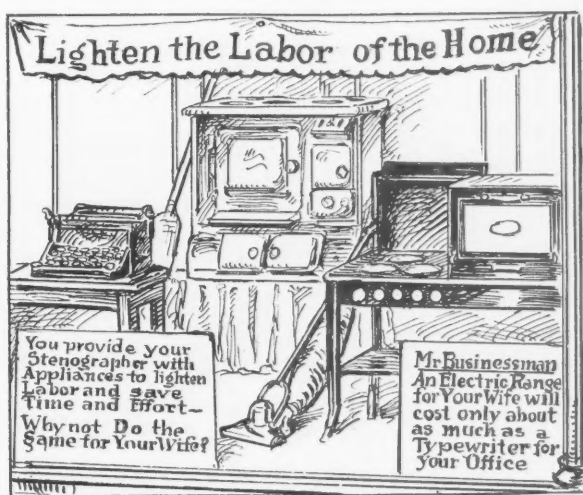
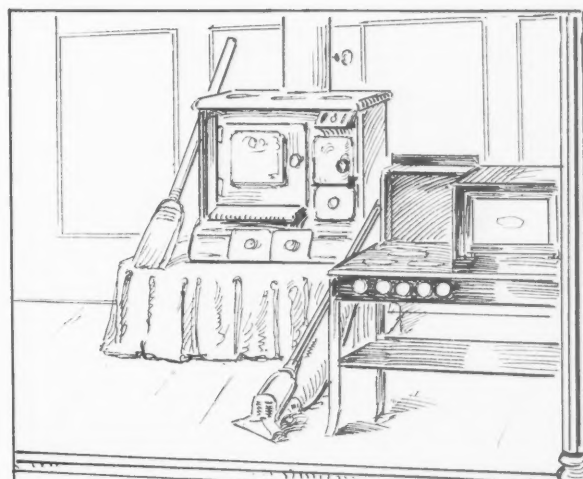
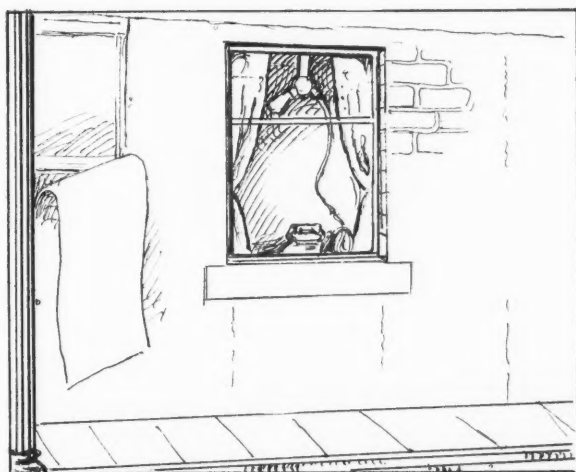
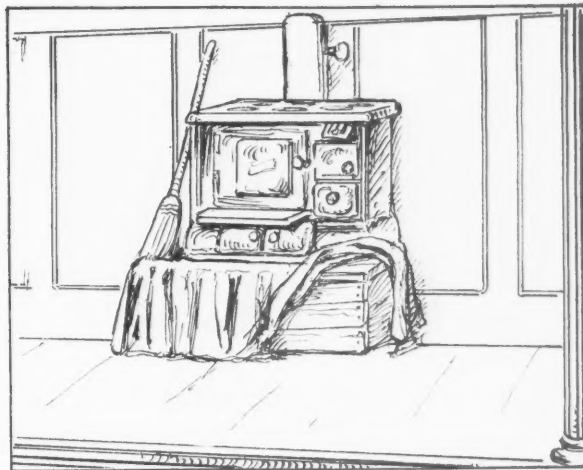
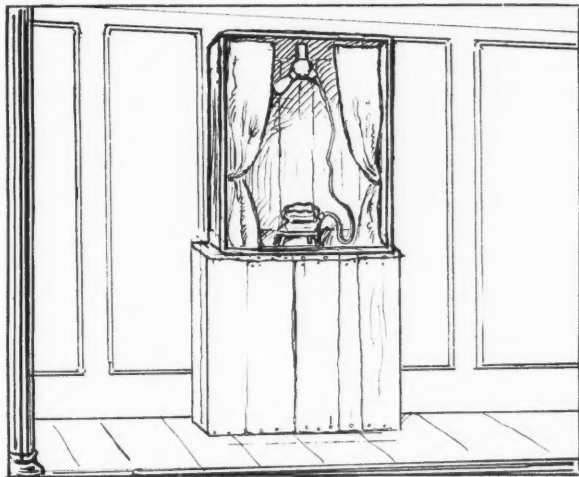
9. Plan a schedule of special "lighten-the-labor" demonstrations to be made a feature of each day in your store—or every other day, or twice a week, according to the length of your campaign. Send out invitations, publish announcements and make as big a function of it as you can. Call on the manufacturers for lecturers to talk for you.

10. Arrange with the leading department stores and hardware stores in town to play up lighten-the-labor goods in one department and tie in as closely as possible in the campaign.

11. Work out a special flat-rate wiring schedule with the contractors, so that you may take orders for them for housewiring, or for extensions to existing installations where you sell additional appliances.

12. Arrange and feature a Fix-it Service, offering to

Two Window Displays That Carry the Message—"Lighten the Labor of the Home"



Here is a "Lighten the Labor of the Home" display which is featured around a window sash, through the glass of which the observer glimpses the first requirement of the electrically equipped home—an electric ironing outfit. Such a window sash can be obtained almost anywhere, and with two packing boxes arranged as in the first sketch, serves as the basis for the display. The inside of the upper box should be covered with the wallpaper, and the lighting outlet and curtains put in place before the sash is set over the box opening. The "wall" of the house is of building paper tacked on a light framework. The "bricks" can be drawn in with white paint. After the background is ready, the rest of the larger appliances are arranged in the front of the window, preferably using attractive placards to explain the uses of each (see page 107). Completing the display is the streamer across the top of the window reading "Lighten the Labor of the Home."

This window is addressed primarily to the business man, for to-day the man of the house is taking an increasing interest in the efficient running of the home, and it is the man, after all, who must be interested and consulted when sales of the larger and more expensive appliances are to be made. The purpose of the above display is to remind the business man that just as his office is equipped with modern labor-saving appliances, his home should have corresponding conveniences for his wife's use. Moreover, it compares for him, the cost of a typewriter roughly with that of an electric range—which is likely to start him thinking of equipment for electric cookery in new and more familiar terms. The old coal stove shown decorated with plenty of soot, dirt and ashes, and the disreputable, back-breaking broom, will serve to remind the master of the unelectrified household of the conveniences (?) with which his own home is still equipped.

call for any electrical appliance that is not working properly and repair it. Offer to convert oil lamps to electric, etc..

13. Make an energetic selling campaign direct to the men, calling on them in their offices, impressing on them that it is their business to save labor and expense in the business of their homes. Go to your customers first, then make a general canvass.

14. Announce a contest to see who can suggest the most useful and practical labor-saving applications of the better-known electrical appliances. Offer electrical devices as prizes for these best "discoveries," and also for the "most uses" suggested for a single appliance. Feature the contests in your advertising—limiting the contestants to purchasers if you prefer, or extending the offer to anyone interested.

15. Have stickers printed bearing the "Lighten the Labor in the Home" message, with your address and telephone number. See that one goes on every package that leaves your store.

16. Join in with the "Shop Early" and "Buy Useful Christmas Gifts" movement, taking advantage of the spirit of the times to encourage the purchase of useful practical Christmas presents this year.

How the Central Station Can Assist

BECAUSE it profits through the sale of current consumed by all appliances sold, the central station can assume much of the promotion and co-operative work which would prove too costly to the dealer yet will contribute greatly to the campaign. Use these Ideas:

1. Take the lead in organizing the "Lighten the Labor in the Home" Campaign, harmonizing the local interests, planning well-balanced committees, etc. Lend your office for meeting purposes. Let your salesmen and stenographers assist and do the work that the committee needs.

2. Undertake the job of interesting the newspapers of the city in the campaign. Meet the editors and sell the idea. Meet the clergymen another evening, the school teachers, the board of trade, the city officials, the other local bodies and line them up in the patriotic movement.

3. See the hardware dealers, department store managers and other men who sell labor-saving appliances of all kinds for the home and get them to tie into the campaign by featuring it in their stores and advertising also.

4. Install, in the best location you can get, a big electric sign to read—"Lighten the Labor in Your Home. Do It Electrically."

5. Contribute to a fund to be raised by all the local electrical interests for display advertising in town. Take charge of the designing and printing of billboard posters and other features.

6. Rig up one of your trucks as a float and send it through the streets to feature different ways to lighten labor the electric way.

7. Devote your showroom to the campaign, carrying

out the suggestions made above under the heading—*What to Do in the Electric Shop*, on page 108.

8. Schedule and advertise a series of lectures on labor-saving topics—"The Evolution of Cooking," "Power in the Home," etc. Send out invitations to customers and prospects.

9. Arrange for demonstrations and addresses before women's clubs, church societies and other social organizations and interest them in the labor conservation movement as a patriotic duty.

10. Offer prizes for papers telling the story of personal experience in the adoption of electrical appliances for labor-saving in the home. These to be submitted to prominent committee of judges and winners published in newspapers.

11. Offer a liberal credit on the purchase of labor-saving appliances for all competition appliances turned in. Offer 25 cents credit on a flatiron of any kind, a coffee pot or percolator; 10 cents on every broom turned in, 25 cents on every washtub or washboard, 50 cents on a wringer, etc., when these articles are surrendered with the purchase of an electric iron, an electric percolator, a vacuum cleaner or a washing machine respectively. Feature this abandoned junk in window displays and in newspaper ads.

12. Offer a special discount on the sale of labor-saving appliances to hospitals, children's homes, club houses, churches and other institutions where they will be seen and appreciated by many people.

13. Make an energetic personal canvass from house to house, to spread the message of the campaign and distribute advertising matter covering the different devices.

14. Devote your advertising space in the newspapers to the campaign and send out special feature advertising with your bills, all concentrating on the one idea—lightening the labor in the home.

Suggestions for the Contractor

THE contractor can contribute greatly to the campaign and participate in the big profits which are sure to result if he will.

1. In your store apply the ideas listed already under the "Electric Shop." Do everything you can to make your store a high spot in the campaign.

2. Study your books and make a list of customers who, you believe, should buy electric labor-saving appliances. Then send a letter to each one of them and offer easy payment, special prices on groups of appliances, etc.

3. Make a personal canvass of the houses of all customers. They may have bought or are about to buy some labor-saving appliance and need additional outlets for connecting it. Here is a little wiring job for you, and in many cases a chance to sell the appliances.

4. Show your customers how additional switches conveniently installed can "Lighten the Labor in the Home." Tell about "three-way" control, pilot-lamp switches, etc.

5. Advertise a special flat-price wiring offer for people who wire their houses to take advantage of what electricity will do to lighten the labor in the home.

6. Feature electric bells and buzzer systems, and inter-communicating telephones from the mistress' room to the kitchen, as labor-saving investments. Make these your leaders in your advertisements and circular letters during certain weeks.

What the Manufacturer and Jobber Can Do

THE success of this campaign will rest in a great measure on the manufacturer and jobber, on how well they tie into the plan and co-operate.

1. Get behind this movement by lining up your district agents and your salesmen everywhere, to boost for it and work for it. Sell them the idea so that they will inspire the customers they call on.

2. Focus your advertising as far as you can on this lighten-the-labor thought, in order to sustain the interest of everybody and point out how each device you manufacture will assist.

3. Offer prizes to your salesmen for the men who make the best records in co-operating with this campaign and contributing to it.

4. Send out letters to your salesmen and a selected list of customers, to keep them in close touch with what your line is doing in the campaign.

5. Work up a special package label or other distinctive wrapping for your goods sold during this campaign, which will mark each appliance as a labor saver, another contribution to the national conservation movement.

6. In your district stores and showrooms carry out as far as possible the suggestions already made under the head of *The Electric Shop*.

7. Play the part of friendly stimulation and work for harmony among the different local interests. Carry the good ideas from one town to the next. Lend a hand where it is needed. In short, the traveling salesman must be a strong, hard-working bond uniting the movement through the land.

How the Individual Salesman Can Help

AFTER all, the actual work will rest upon the effort of the individual salesman. He must play his part in a big way.

1. Take hold of this campaign not as a little selling scheme but as a patriotic national crusade for labor saving and economy. Make your customers see it on this high plane, and line up every one of them.

2. Go out to make a thorough job of it and *cover* your territory. See your friends. Call on your customers. Get after every stranger you can reach. This is a campaign to the homes and *every* home must be equipped.

3. Do your part in harmonizing local interests and keeping the campaign moving freely. Be a little self-appointed walking delegate to bring about a closer co-operation among the members of the local electrical family.

4. Be on the outlook for new ideas that can be used in window displays, in store sales, in advertising, and pass them around.

5. Remember that the work is going to be done by fitting out just one home at a time, by selling one appliance after another and that it is the individual sale that counts. Go after every sale to win, for that sale is essential to the campaign.

6. "Do Your Bit" in this campaign. Help win the war.



SPREADING THE "LIGHTEN THE LABOR OF THE HOME" MESSAGE THROUGH THE MOVIES

Manufacturers of electrical labor lighteners have movie films showing the use of their products, which films the local store man can secure for presentation in his own town. Here are two "stills" from such a Westinghouse film which traces the labor-lightening process from the stage of muddy coffee and burned toast to electric cooking, sweeping and washing.

Eighty-nine Practical Uses of Electricity

Ideas to Pass Along to Your Public Through the Stories and Advertisements,

Here are hunches for dozens of counter and show-window placards. Simply point out to your card writer the names of the appliances you want to use the cards with, tell him to "follow copy," and he will produce results.

Here are dozens of real "stories"—big and little—for your local newspaper man—also items for his miscellaneous column. Get him to use three or four in each issue. These useful hints will interest his readers.

Use these phrases as catch lines in your advertising—an appliance or a line at a time. Here is a fertile field of suggestions for new aspects of appliance uses to feature in your advertising copy—here are phrases that will serve your purpose, ready-made and waiting.

Print these lines on stuffers to be inclosed with your letters and bills. Or print them on stickers to go on envelopes, parcels, appliances. Play up on each such stuffer or sticker the slogan "Lighten the Labor of the Home."

Buffing Wheel and Grinder

When the knives need polishing, a touch on the electric buffing wheel does the trick in a flash.

Polishing silver and bright-finish electric appliances are other accomplishments of the buffing wheel, while the grinder sharpens knives, scissors, lawn mowers and other cutting edges with equal dispatch.

Electric-Driven Dough Mixer

The electric mixer changes the frequency of home-made bread from once in a while to several times a week.

Stirring is the only laborious part of making cake at home—and the electric mixer does it quickly and well.

The mixer is also useful for stirring batter for pancakes and waffles.

Kitchen Grinder

A motor-driven kitchen grinder soon establishes its place in the housewife's heart by grinding cornmeal, buckwheat flour, entire wheat flour, making peanut butter, chopping nuts for cake and breaking up dry bread and crackers into crumbs for use with soup and meat dressing.

By changing the cutters to suit, meat, spices, vegetables and fruits may also be cut or shredded in this handy helper. With the grinder's help, the cheaper cuts of meat can be converted into delicious dishes.

For vegetable salad the grinder will cut up cabbage, cucumbers, onions, peppers, etc., as fast as they can be fed into the chopper.

Coffee Mill

The objection to hand grinding is no longer an excuse for foregoing the superior flavor of freshly cut coffee. At the touch of a button the electric coffee mill works rapidly and consumes little current.

Egg Beater

For beating omelet, egg-and-milk puddings, home-made milk shake, scrambled eggs, milk punch and meringue for pie, and for mixing salad dressing, the electric egg beater is a great convenience.

Dish Washers

Ask any housewife what part of her work she regards as most unpleasant and she will answer "washing dishes." The electric dish washer solves a big problem three times a day.

Electric Floor Polishers

Hardwood floors and stairways lend a very desirable touch to the home—but they must be polished occasionally. The electric floor polisher produces the desired effect without backache.

Range

Taking out the ashes is not one of the attendant ceremonies of cooking with an electric range.

Food shrinkage with electric cooking is very low—and that counts in the present need for economy.

An electric range can be used for preserving "the cold-pack" way, described on a following page of this issue.

Fans

For drying sliced fruits and vegetables the electric fan is extremely useful.

It also renders valuable service in speeding up indoor laundry drying on rainy days, and in drying freshly-painted or varnished floors.

Placed near a wire basket of freshly-washed dishes the fan will eliminate the towel process. And in homes heated with hot-air furnaces the fan will aid summer ventilation if located in the cold-air shaft of the furnace.

When turned on a steam radiator in winter the breeze from the fan will speed up the heating of the room.

When a room or closet that has been closed for a long time is opened, the fan will change the air thoroughly and promptly.

Grills

Breakfast-getting is made easier with an electric grill. The eggs and bacon can be servantlessly prepared on the table.

Ice Cream Freezers

Motor-driven ice-cream freezers save time and temper in the preparation of the most popular of summer desserts.

Immersion Heaters

Screwing in a plug and snapping a switch is a much easier way of getting hot water for shaving or washing than building a coal fire in the kitchen range.

that will "Lighten the Labor of the Home"

Medium of Window Cards, Store Signs, Newspaper Envelope Stuffers, etc.

Have each of your store attendants read this list through. It contains ideas and suggestions that will be useful and may present new arguments to repeat to the next customer. Refer to this list for suggestions concerning new uses for familiar appliances.

Post up these pages where your customers can see them and call their attention to the list. Leave this issue lying open on your counter, so that visitors can read about all the uses of electrical appliances that "Lighten the Labor of the Home."

And if you know of new uses for well-known appliances that lighten the labor of the home, remember that we have a standing Dollar Idea offer—one freshly laundered greenspot for each new selling idea printed—and send us your discovery along with your name and address—it may be of material help to some other reader.

Percolators

About the easiest way in the world to make coffee is with an electric percolator, and people who taste the electrically brewed product are not in the habit of reverting to the old method of stewing up grounds in a tin pot.

Kitchen Motor Unit

The electric motor unit designed for attachment to kitchen devices which are operated by hand cranks, is a great time saver. It will turn the bread mixer while the housewife is preparing the pans for baking, and can be adjusted to drive a dozen or more different devices.

Toaster

The electric toaster reposes on the dining table and supplies the family with fresh, hot toast as it is wanted, effecting at the same time the saving of stale bread.

Sewing Machine

Any foot-power sewing machine can be equipped with a portable electric motor, and portable electric sewing machines are now on the market at the price of the old treadle stitchers.

Portable Stove

Small electric stoves with a few feet of cord afford a portable cooking and heating service which saves many steps.

Thermostat

The thermostat is an electric janitor that will open the furnace drafts in the morning, and close them when the home becomes warm.

Electric Faucet Water Heater

For small quantities of hot water the faucet type heater is very useful.

Inter-communicating Telephone

Used between dressing room and kitchen, house and garage the inter-communicating telephone saves steps and time.

Vacuum Cleaner

Among the labor saving activities of the electric vacuum cleaner are the following:

Rapid, dustless cleaning of carpets, curtains, rugs and furniture upholstery; the cleaning of automobile tops and upholstery, and dusting off clothing.

Lighting

Electric illumination sidesteps the labor of filling kerosene lamps and the bother of replacing gas mantels. A touch, not a lighted match, makes it instantly available.

"Two-way" and "three-way" switches can be installed so that a light can be switched "on" at one point and "off" at another. This saves steps in the case of stairways, rooms with two doors, etc.

Milk Warmers

When the youngest member of the family demands nourishment three or four hours before sunrise the electric milk warmer cuts down the resulting labor to a minimum.

Water Supply System

For country residences the electric pumping system automatically maintains a supply of water day and night.

Washing Machine

The antidote for Monday drudgery is the electric washing machine. Not only the washing but also the operation of the wringer is performed electrically. And in one new type of washer the clothes are "wring" by centrifugal force without removing from the tub—which is made to revolve at high speed like a cream separator.

Iron

The electric iron makes it possible to put the finishing touches on the laundry in a cool spot, avoiding the old-time oven-like kitchen on ironing day.

It saves steps going from stove to the ironing board.

Further, it supplies a portable pressing service for the home or for travelers.

Individual Lighting Plant

For the rural home not reached by central station service the individual lighting plant paves the way for the electric lighteners of home labor.

HOW THE NEWSPAPER CAN HELP YOU SELL

A Few Suggestions for Your Advertising in the "Lighten the Labor of the Home" Campaign—Some Ads that You Can Use

By EARL E. WHITEHORNE

ADVERTISING naturally must play a big part in every local campaign to Lighten the Labor of the Home, for the people must be told about it. The idea that the present national crisis is a call on every

man and woman to eliminate waste of foods and labor in the home must be firmly planted in every mind. The thought that by more efficient methods of housework time can be saved for Red-Cross work, and many cash econ-

omies effected, must be brought home to every household. The electrical men in every town must advertise this campaign energetically, if they would accomplish real results through the introduction of electrical appliances into many homes where the housework has not been done electrically in the past.

This doesn't mean that any big expensive educational propaganda is suggested. It wouldn't be practicable. It isn't necessary. For, after all, the way to sell appliances is to sell appliances and the way to advertise appliances is to talk to the public about definite individual devices and build up the desire to own them. But behind your ads can be the spirit of the campaign, and the bigger idea of lightening the labor for a purpose. It won't be hard to advertise a campaign like this. It will be easier and more interesting than at normal times, for you are doing something that will help each family solve its biggest problem. You are eager to tell about it. They are eager to hear.

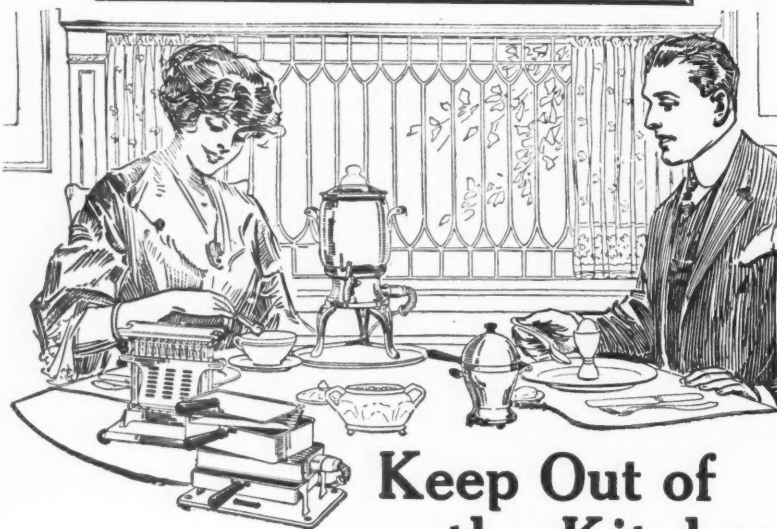
For printed matter, booklets, folders and the like to put into the hands of interested prospects the local retailer can rely upon the manufacturer whose goods he sells. He can count on that kind of advertising material being ready for him as he needs it. But he must be liberal in his use of newspaper space, and I want to point out how he may make much of this at small expense and trouble. For, of course, there are no special ads among the manufacturers' dealer-help electrotypes, just written for a Lighten the Labor campaign—with this timely message featured in them. Therefore, there are three things to do:

1. Write to the manufacturer and tell him what you plan to do and what you need.

2. Call on the Society for Electrical Development, if you are a member, and ask that a set of ads be prepared for you—which the society will gladly do for any member.

3. Pick out among the manufac-

LIGHTEN THE LABOR



Keep Out of the Kitchen

Breakfast in comfort when the maid is gone by cooking everything right on the table the electric way. A Grill and a Percolator will do it all. Add a Toaster and an Egg Boiler if you will.

"Do It Electrically" and You are Independent of all Kitchen Complications

Every one of these "Universal" appliances is a perfect cooking device, economical to operate, not expensive to buy. A wonderful convenience for breakfast, luncheon, tea or a late supper. They save so many steps.

Come in and see these Electrical Home Comforts. We want to show you how they work and what they do.

DEALER'S NAME AND ADDRESS

IN YOUR HOME

OR USE THIS SUBSTITUTE COPY WELL DISPLAYED

Many Women Are Saving Money Now by Using Electrical Household Appliances and Getting on Without a Servant or a Second Maid. They cook their breakfast on the table—a perfect meal in comfort without one trip to the kitchen. An electric grill heats cereal, cooks eggs and bacon, and makes toast, while the electric percolator boils delicious coffee. It costs but a few cents a meal and saves on kitchen fuel and labor. There are a dozen different electric cooking comforts for table use. They are absolutely practical and satisfying—all you need for getting breakfast, lunch or tea.

Come in and look them over. See how they work and what they cost.

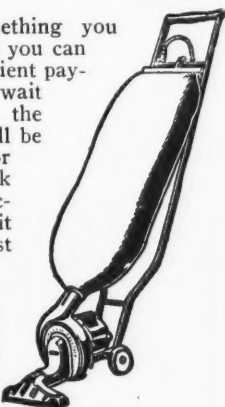
LIGHTEN THE LABOR

War-time Demands Efficient Methods in Your Home! Throw out the Wasteful Broom and Do Your Cleaning the Electric Way.

The electric vacuum cleaner offers a practical economy that every housewife should take advantage of at once. It saves most of the time now spent in sweeping. It saves the rugs and carpets. It protects your health from flying dust and germs. It cleans the house far better than the broom can.

Here is something you need *now*. And you can buy it on convenient payments. Why wait longer? For the time it saves will be clear gain for Red Cross work or rest or recreation. And it costs almost nothing to use.

We want to show you the Western Electric Vacuum Cleaner. It is a perfect cleaner—the best one on the market. Come and try it.



DEALER'S NAME
AND ADDRESS

IN YOUR HOME

OR USE THIS SUBSTITUTE COPY

Save Those Hours of Old-time Sweeping.

Here is a practical War-time economy that every household should take advantage of. Save these hours for Red Cross work. Save the wearing of your carpets. Protect your health from flying dirt and germs.

The Western Electric Vacuum Cleaner will do your cleaning better than the broom can and in less than quarter of the time. We sell them on easy payments. Come and try this cleaner.

turers' listed cuts such pictures as will fit well with the message of your campaign, and then write your own localized ads to go with them.

And this is easy if you just remember three or four points:

Don't try to write an "advertisement" using very proper English and well-chosen words. Just talk United States and say your say right from the shoulder and stick to one thought throughout the ad. Just try to sell one thing at a time, but tell the man

or woman who will read just why they need this appliance.

Be very brief in writing a newspaper ad, because you know you've got to get the message over to the reader who is merely glancing through the paper. This ad must act just like the headlines on the newspaper article, so that the eye can take it in at a glance. You will interest a lot of people that way, who would never stop to read a lot of type just to find out what it was all about.

Don't exaggerate or use extravagant adjectives in a newspaper ad.

For if you do nine readers out of ten will mutter "bunk" and look at something else. Straightforward, forceful statements bring conviction, but it does not pay to rave about a thing you're advertising.

Don't try to have your ad set up too fancy. Just leave that to the man who sets the type, and put it up to him to make a simple display that will make the main point stick out plain.

I have selected from the "dealer help" ad-cut catalogs of several manufacturers a set of illustrations that I think I would like to use if I were a

LIGHTEN THE LABOR



The Electric Iron Saves a Lot of Work

You know that it is cooler and more comfortable to use—but did you realize that it saved on labor also? It does. It saves hundreds of steps each week between the ironing board and stove. That's hours of labor that cost money.

IT PAYS TO USE AN ELECTRIC IRON

It holds an even heat—no cooling and no scorching. It saves fuel. It keeps you cool and comfortable. It costs only a few cents for a whole week's ironing. We want to show you this G.E. Iron and have you try it with your own two hands. Will you call or shall we send one to your house?

DEALER'S NAME AND ADDRESS

IN YOUR HOME

OR USE THIS SUBSTITUTE COPY WELL DISPLAYED

If You Are Looking For a Way to Economize on Labor in Your Home and Save Expense—Consider this—

Each week for probably two days some one is ironing clothes in your house. But you can save a quarter of the time and all the kitchen fuel it uses up by "Doing It Electrically." Why not begin it now?

Saving labor helps us win the war.

The electric flatiron saves this time because there is no walking to and from the stove—no cooling iron, no scorching. The work goes right ahead in comfort—cool and thorough at a cost of only a few cents a week. Come in and see this G.E. Iron and how it works.

LIGHTEN THE LABOR



Sew By Electricity — A Practical War-Time Economy

Most women would make more clothes at home and save a lot of money if the sewing machine were not so tiring and time consuming. And now the problem's solved. "Do It Electrically."

Put a Westinghouse Sew-Motor on Your Own Machine

This little motor does the work. You simply do the guiding and regulate the speed by gentle pressure on a foot controller. It doubles the amount of sewing you can do. It saves you money.

Come in and let us show you all about it. Or, shall we send one to your home?

**DEALER'S NAME
AND ADDRESS**

IN YOUR HOME

OR USE THIS SUBSTITUTE COPY

"I could get so much more sewing done, if I had an electric motor, and save money on my clothes." That's what one woman said to us.

And it is true. Here is one practical economy that every woman should take advantage of—**right now**. It will help her "Do Her Bit." It makes home sewing possible, for it puts an end to the drudgery of pushing a treadle machine.

With a Westinghouse Sew-Motor on your own machine there is nothing to do but guide the work. It doubles the amount of sewing you can do. You need one on your own machine. Come in and let us show you all about it.

dealer, working hard to put across a Lighten the Labor of the Home campaign in a small city. I have asked these manufacturers to send me electros of the cuts, just as you will do yourself, and I have written a series of ads that I believe will be of value to any dealer in featuring the labor-saving appliances. These ads could be run in the order I have numbered

them, and any one of them may be repeated several times without losing its value, by letting several of the other ads come in between.

These ads may suggest something to you for your own newspaper advertising. You may think you would like to use some of them just as they are. If so, just write the manufacturer—if you sell his goods—and ask him for the cut I've used. Then just cut the ad itself out of the page, or better—send this whole magazine over to the newspaper and let them set the ads just as I have them here, and then you'll get your ELECTRICAL MERCHANDISING back undamaged.

THE GREATEST PULLING POWER OF ADVERTISEMENTS IS SIMPLICITY

These ads are simple. They are not clever, but they are plain, direct and tell their story, and that is the secret of a profitable ad. Just study them a little and you will find that you can sit down easily and write as good a set yourself, little messages about a washer or a cleaner, that will talk straight out to just the man or woman that you want to reach. It's up to you how much space you can afford to use. But if it is a single or a double column space, don't make it smaller, or say more than I have said here. A still bigger space will catch more eyes and start more people thinking, and will sell more goods.

And remember, that whether you use a single column 5-in. ad or a four column 12-in. ad, it must not be considered an expense but an investment. For if you talk sense in that ad and speak your message clearly and distinctly, any ad can be depended on to pay its way, not in immediate sales that you can plainly trace,

A House-Wiring Ad with a Personal Touch

In one of its house-wiring campaigns the Iowa Railway & Light Company, Cedar Rapids, Iowa, ran a full-page ad in the local paper. About one-third of this space was taken up with a list of names of those whose homes had been wired in a previous campaign. As most people want to know what the other fellow thinks about a proposition, this list gave them an opportunity to look up the name of a friend whose house had been wired and with whom they could first talk it over.

LIGHTEN THE LABOR



Labor is High—Why Don't You Take Advantage of This Most Convenient Saving on Your Weekly Wash?

Don't go on wasting the high cost of a full day's labor every week by washing in the old-time way. "Do It Electrically," and a big week's wash is all done in two hours. And clothes are not torn or worn nor buttons broken. It is an economy well worth while in these war times.

The Thor Electric Washer is built and sold by tens of thousands to homes just like your own. You can purchase it by easy payments. It costs almost nothing to use. We'll send one to you to try next week. You need it now!

**DEALER'S NAME
AND ADDRESS**

IN YOUR HOME

OR USE THIS SUBSTITUTE COPY

You Can Save Money on Your Weekly Washing.

You can do the work that now costs a full day's labor in two hours if you "Do It Electrically" with a Thor Washer. Two hours finishes a big week's wash—beautifully clean, without a lace torn or a button broken.

The Thor Electric Washer costs almost nothing to operate. We will sell it to you on convenient payments, and it will buy itself with money saved on labor. Used successfully in thousands upon thousands of homes—just what you need. Come in and see just how it works.

perhaps, but in good business gained directly and indirectly. Experience has proved it.

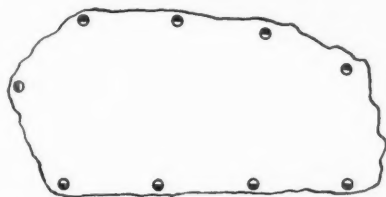
So use the newspapers in this campaign of yours to spread the gospel—"Lighten Labor of the Home." Use folders, booklets, posters, too. Do everything you can to make the effort a success. But keep a-talking through the newspapers, for that is where all eyes are listening.

Lighting the Home-Town Drill Field

How a 450-Ft. by 250-Ft. Area at Morristown, N. J., Sufficient for Drilling 400 or More Men, Was Illuminated at an Outlay of \$411.70 for Equipment

By A. B. ODAY

ALMOST simultaneously with the declaration of war came the formation of many "home guard" organizations. These military units are composed largely of the business men of each community and consequently it has been necessary that their drilling be done in the evening. As the hours of avail-



Sketch showing shape of drill field and location of lighting units

able daylight grow more and more limited it becomes necessary to resort to artificial illumination in order to concentrate the work and efficiently develop such drill organization.

Many such drill fields have been successfully illuminated. The size and shape of the field, as well as the type and arrangement of lighting equipment, varies greatly. However, the one shown in the accompanying

illustration may be considered as typical.

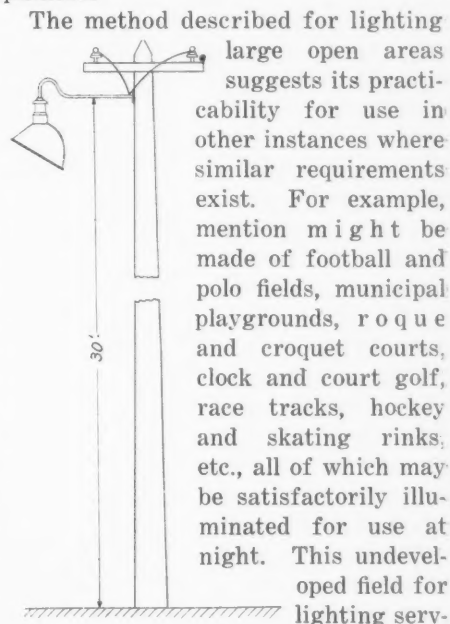
This drill field is located at Morristown, N. J., and is of size sufficient to permit the drilling of about 400 men at one time. The lighted area, the shape of which is shown, is about 450 ft. long and about 250 ft. maximum width.

The method of illumination consists of lighting units placed about 30 ft. above the ground on wooden poles located as indicated around the edge of the field. Such a system is advantageous in that no poles are located on the drill ground area, thereby eliminating obstruction which would handicap and complicate maneuvers. The units consist of 750-watt Mazda C lamps equipped with angle-type porcelain-enamel steel reflectors. As nine such lamps are used for this drill field the power taken per unit of area is approximately 0.06 watt per square foot.

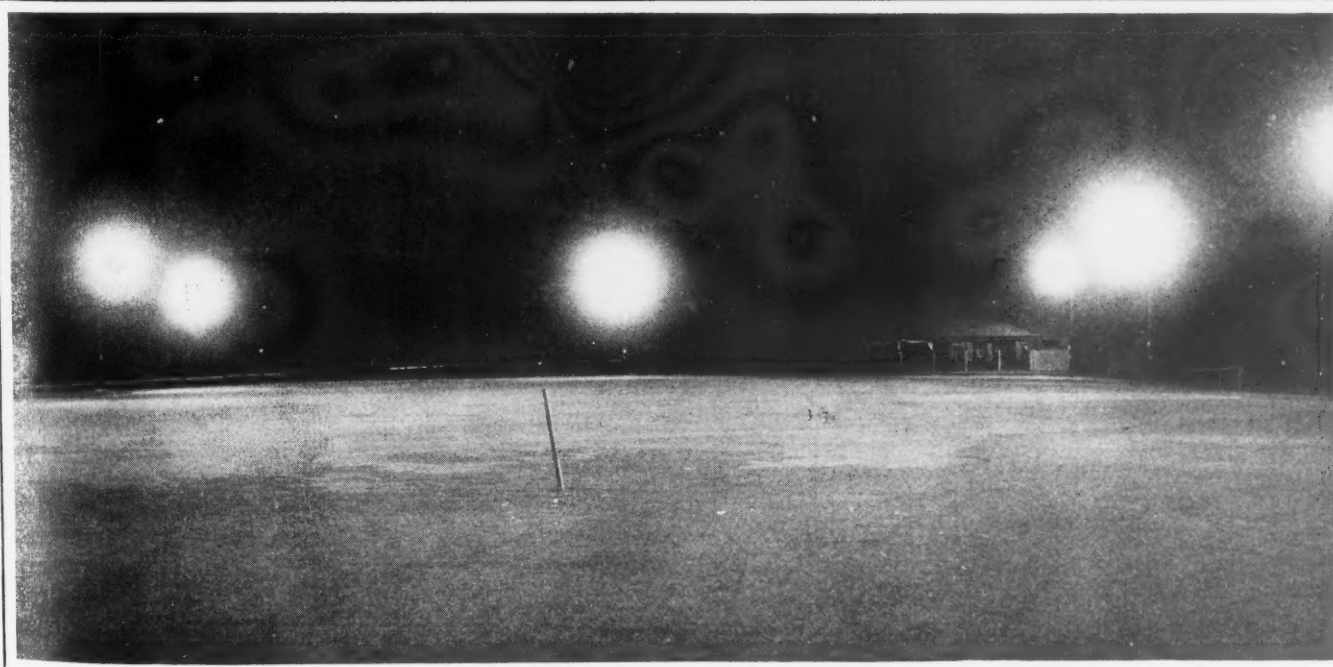
With the spacing and hanging height used the resulting distribution of light from these fixtures is very satisfactory, there being a fairly even intensity over the entire area. The lamps are high enough

above the ground to eliminate objectionable glare while the intensity, according to one of the Home Guard men, is sufficiently high to permit fine print being easily read at any point on the field.

The total cost of the nine poles complete was \$411.70, an average of \$45.75 each. No. 6 triple-braid weatherproof wire was used, with standard line construction throughout, the poles and fittings being painted.



The method described for lighting large open areas suggests its practicability for use in other instances where similar requirements exist. For example, mention might be made of football and polo fields, municipal playgrounds, roque and croquet courts, clock and court golf, race tracks, hockey and skating rinks, etc., all of which may be satisfactorily illuminated for use at night. This undeveloped field for lighting service presents opportunities for contractors, central stations and electrical supply houses which are well worth study and development.



Drill field at Morristown, N. J., lighted by nine 750-watt Mazda C lamps in porcelain-enamelled reflectors. This field measures 250 ft. by 450 ft.

"Come to New Orleans October 9 to 13"



Col. Robley S. Stearnes, president of the National Electrical Contractors' Association, who extends to the electrical contractors, dealers, manufacturers, jobbers and central station interests of the country the hospitality of New Orleans in connection with the convention of the N. E. C. A. to be held there Oct. 10 to 13. Colonel Stearnes, who is one of New Orleans' best-known electrical figures, is also president of the Standard Electric Construction Company, engineer, contractor and dealer.

President Robley S. Stearnes' Invitation to All Electrical Contractors and Electrical Men Interested, to Attend the National Electrical Contractors' Convention Early Next Month. Important Contractor-Dealer and Association Topics to Be Discussed by Prominent Speakers

ELECTRICAL manufacturers, electrical jobbers, central station men and electrical contractors, whether members of the N. E. C. A. or not, will all receive a warm welcome in New Orleans—the greatest city in the South—when the National Electrical Contractors' Association of the United States assembles there for its seventeenth annual convention during the week of Oct. 8.

The convention program has been completed, and while care has been taken to see that all those attending shall have a good time, the business of the convention has also received fullest consideration, and there is no doubt but that more real beneficial association legislation affecting the contractor-dealer will be up for final disposition than has been before any convention held by the N. E. C. A. in years.

SOME OF THE SPEAKERS

Gov. Ruffin G. Pleasant of Louisiana and Mayor Martin Behrman of New Orleans will welcome the members and guests of the convention. The president of the association, whose home is in the Crescent City, has carefully

attended to all the details, and has arranged an entertaining program for all attending—especially for the ladies.

William J. Clark, S. E. Doane, and J. Nelson Shreve of the manufacturers; Franklin Overbakh of the jobbers; M. S. Sloan, representing the central station industry; J. R. Galloway, W. K. Tuohy and J. R. Strong of the contractors; J. M. Wakeman of the Society for Electrical Development; Lynton T. Block on insurance, and last, but not least, William L. Goodwin, known as the "main spirit of co-operation and up-to-date business methods for the contractor-dealer," all will be there and each will have a message to give.

Messrs. Rendler, Butte and Kohlwey of California; Mr. Fowler of Tennessee; Messrs. McCleary and Busby of Michigan; Messrs. Freeman, Neugard, McGuineas and Poelma of Illinois; Messrs. Adam and Burns of Missouri; Messrs. Coglein, Hixon, Wilson and Chapman of New England; Mr. Galloway of Washington; Messrs. Peet, Kalisher, Hilton and Weideman of New York; Mr. Newman of New Jersey; Mr. Wilcox of Alabama; Mr.

Engleby of Virginia; Messrs. Chase and Pace of Pittsburgh; Messrs. Buchan and Beattie of Ohio; Messrs. Sanborn and Swanson of Indiana; Mr. Andrae of Wisconsin; Mr. McKinney of Georgia; Messrs. Comstock, Lord and Newbery of the "Conference Club"; Messrs. Brown, Feiker, Duffield and Caldwell of the electrical press, and others in various lines of the electrical trade have also promised their attendance.

There is no doubt of a successful convention, and no one interested in the welfare of the electrical contractor-dealer can afford not to be on hand and take part.

NEW ORLEANS, FIRST CITY OF THE SOUTH

New Orleans, herself, is a most interesting city to visit. She leads in many lines of trade, being first in sugar, coffee, rice, cotton, fruit, molasses, sulphur, salt and oysters. She has the finest water-supply system in the world, perfect sewerage and drainage, and the best police, fire department and school systems in the South. The second port in America, with 30 miles of harbor equipped with steel

sheds and docks, the largest and most approved cotton warehouse and grain elevator system known, the largest port on the great Mississippi River, receiving the commerce of twenty-six States by river, and reached by ten great trunk lines, with vast deposits of iron and coal at her very doors, insures for New Orleans a healthful and prosperous business the year round. And last, but not least, the New Orleans electrical contractors are as up-to-date, prosperous and progres-

sive a set as those of any city in America.

Now, won't you come down; be our guests, and while we are together under such pleasant and congenial circumstances maybe our minds will be in such a co-operative frame that we will break the "hoodoo"—get together on up-to-date business lines—go back home—learn how to be fair with each other and with the public, and take our proper places in the great business world.

This would be a pleasant remembrance of your trip and stay "way down South in Dixie," where the North is as welcome as the East, and where the East is as welcome as the West, and where there is no North, East, South or West, or as the old negro preacher once announced as his text—"we are all brothers and sisters in the same Lord."

ROBLEY S. STEARNES,
President National Electrical Contractors
Association of the United States.
New Orleans, La.

Program of National Contractors' Convention at New Orleans, October 9 to 13

The Grunewald, one of New Orleans' leading hotels, will be headquarters for the convention of the National Electrical Contractors' Association, Oct. 9 to 13. During convention week the hotel will conduct an electrical show on its lobby floor, seventy exhibit booths being planned for.

The program of the week's sessions is as follows:

MONDAY, OCT. 8—10 A. M.
Meeting of National Executive Committee.

TUESDAY, OCT. 9—10 A. M.
Meeting of National Board of Directors.
1.30 P. M.—"Round Table" of Instruction on Unit Labor Costs.

WEDNESDAY, OCT. 10—10 A. M.
Opening of convention by President Stearnes.
Address of Welcome—Mayor Behrman of New Orleans.

Response—Vice-President W. K. Tuohy.
Address—Gov. R. G. Pleasant—"Welcome to the Pelican State."
Response—John R. Galloway, past-president N.E.C.A.
Address—S. E. Doane, chief engineer, National Lamp Works, Cleveland, Ohio.
Address—William J. Clark, manager traction department, General Electric Company—"Electrical Manufacturers of America as Compared with Those of Foreign Countries."
Address—Franklin Overbagh, general secretary Electrical Supply Jobbers' Association—"The Jobber."
Address—J. Nelson Shreve, treasurer Electric Cable Company of New York—"Contractors' Obligations in War Time."

Address—Lynton T. Block, manager Utilities Indemnity Exchange, St. Louis—"Insurance for the Electrical Contractor."

Address—M. S. Sloan, general manager New Orleans Railway & Light Company—"The Co-operative Central Station."

Address—J. M. Wakeman, general manager Society for Electrical Development—"The Relations of the Society Towards the Contractor-Dealer."

2:30 P. M.—Executive business session, members only.

9.00 P. M.—Reception and dance.

THURSDAY, OCT. 11, 10 A. M.
Business session, open to all electrical contractors whether members or not.

Report of Universal-Data and Sales-Book Committee—G. M. Sanborn, chairman.

Report of Resolutions Committee—J. R. Strong, Earnest McCleary and W. L. Goodwin.

Address—William L. Goodwin—"Ills in the Industry and Their Remedies Through the Proposed National Association of Electrical Contractors and Dealers."

Open discussion and disposition of Resolutions Committee's report.

10.30 A. M.—For the ladies, visit through "Vieux Carre," French Quarter, shopping district. Com-

mittee in charge: Messrs. M. G. Buchan, C. S. Barnes, I. G. Marks and Adolph E. Hanemann.

12.30 P. M.—Luncheon for the ladies, Restaurant "La Louisiane."

2.30 P. M.—Business session.

3.00 P. M.—For the ladies, special performance at New Strand Theatre. Committee in charge: Messrs. Abry Cahn, Walter A. Dilzell, Edward P. Phillips.

Entertainment for members and guests at "Spanish Fort" by New Orleans Jovian League. Committee in charge: Messrs. W. J. Aicklen, W. E. Clement, W. A. Porteous and Abe Marks.

FRIDAY, OCT. 12, 10 A. M.
Business session for members.
12 A. M.—For the ladies, special trip to "Bohemia."
2 P. M.—Automobile trip, "Seeing New Orleans."
7 P. M.—Annual dinner, members and guests, in the "Cave," Jas. R. Strong, toastmaster.

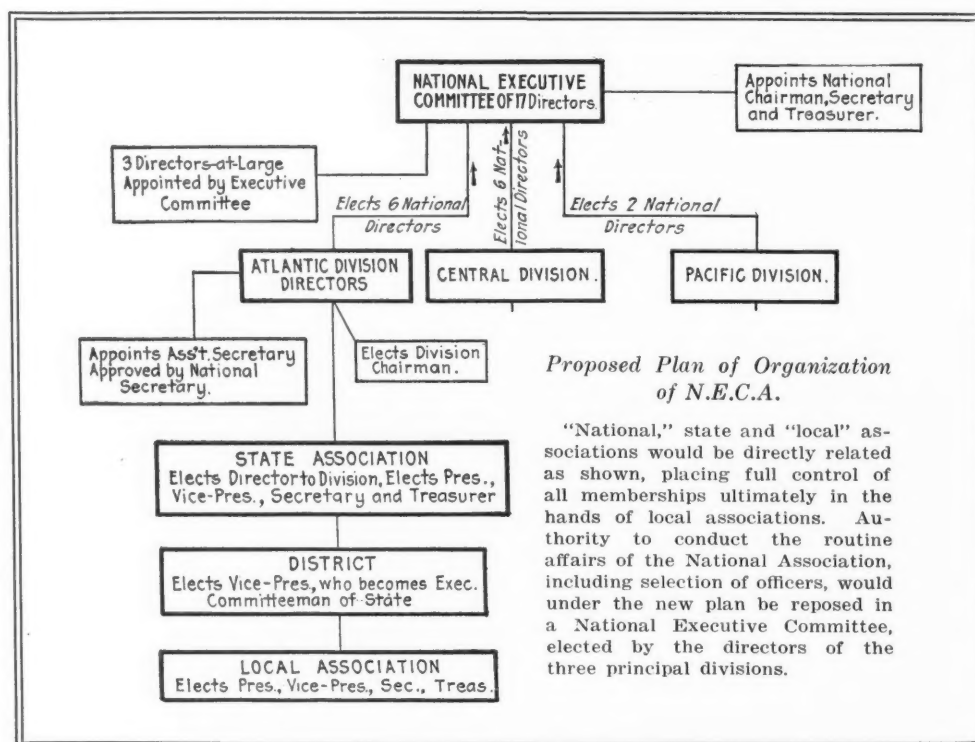
SATURDAY, OCT. 13, 9 A. M.
Organization meetings of national directors and executive committee.
12 M.—Steamer leaves head of Canal Street to view the Harbor of New Orleans, Chalmette Monument, Naval Station and cotton warehouses.

The Conference Club—the organization of the larger electrical contracting companies doing an interstate business—has also accepted the invitation of New Orleans to hold its October meeting in the Crescent

City, and will assemble there the three days just preceding the N.E.C.A. convention—Oct. 6, 7 and 8. L. K. Comstock of L. K. Comstock & Company, New York, is president of the Conference Club.

The Plan to Reorganize "the National"

An Outline of the Purposes behind the Revision of the N. E. C. A. Constitution which will be offered for Ratification at New Orleans in October—Contractors Encouraged to Enter Field of Retail Distribution of Electrical Merchandise—Relation of Local and National Bodies Under Proposed Plan.



AT the New Orleans convention of the National Electrical Contractors Association the delegates present will have the opportunity of adopting formally and officially a new constitution which it is expected will mean great things to the contractors, dealers and contractor-dealers of the country.

The new plan, which has been referred to at length in articles in the June, July and August issues of *ELECTRICAL MERCHANDISING*, is the work of the committee on constitutional revision, consisting of James R. Strong, Earnest McCleary and W. L. Goodwin.

TO BROADEN MEMBERSHIP

It is proposed to broaden the membership of the association to include a larger proportion of the 25,000 electrical retailers of the country than the 1200 members now enrolled in its lists. Contractor members will be encouraged to become electrical merchants, and to apply progressive merchandising methods in their business. Incidentally it is proposed to change the

name of the association so as to include the contractor-dealer specifically in the official title.

While it is expected to increase the membership, the new enlarged association will be handled even more efficiently than ever, by the plan of concentrating executive authority in the hands of 17 national directors who, as shown in the sketch, will appoint the national chairman, secretary and other officials, and otherwise conduct the business of the association. The arrangement will leave the convention sessions free for the discussion, by members, of the contractors' own business problems, rather than involving them in matters of association routine.

The chart also shows how the association is proposed to be made up of divisions of states—Atlantic, Central and Pacific—each in turn made up of state and local organizations. The fact that local and State associations will have control over all memberships is considered very desirable.

The smaller contractors will also be encouraged to become members of the

new association, by the graduated scale of dues. All of the small firms will be eligible on payment of \$5 a year, the minimum for annual dues, while the larger firms will pay proportionate dues based upon their annual business.

The new plan contemplates State associations of contractors with constitutions similar in spirit and purpose to the National association. Several such State constitutions have already been adopted, including those enacted in California, Oregon, Washington and New Jersey, and similar schemes of organization are now contemplated by associations in New York, Massachusetts, Michigan, Illinois and other states.

ELECTRICAL MERCHANDISING has asked the opinions of leading contractors, and others prominent in the electrical trade, concerning the new plan to reorganize the association, and these views, which appear to be representative of contractor opinion throughout the industry, are reproduced on the following pages.

The N. E. C. A. Convention at New Orleans, Oct. 9 to 13, Will Be Reported in Full in "Electrical Merchandising" for October—Out Oct. 15

What Leading Contractors and Members of the Trade Think of the Movement to Reorganize the National Association

As Expressed in Letters to ELECTRICAL MERCHANDISING

Will Tremendously Broaden the Scope and Usefulness of Association

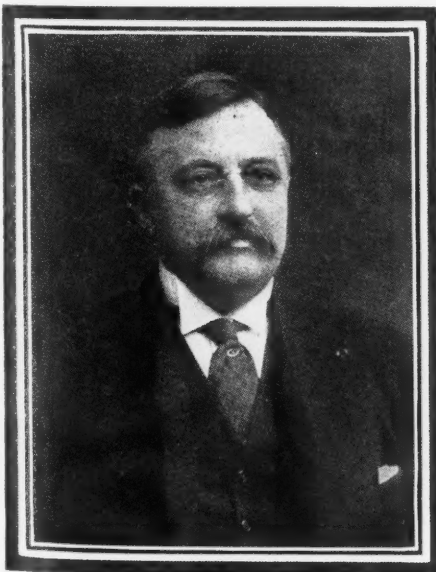
JAMES R. STRONG, New York City
Past-President N. E. C. A., and Member of
Committee on Constitution Revision

The changes in the N. E. C. A. contemplated in the report of the Committee on Constitutional Revision, will tremendously broaden the scope and usefulness of the Association, while at the same time tying together the local, state and national bodies, to the general advantage of each and of their individual members.

Frequent local and divisional meetings and conventions which are possible under the new plan are bound to exert a desirable educational effect on the entire trade—teaching electrical contractors how they can improve not only conditions in the electrical business in general, but each man's individual business in particular in a way that will put money in his pocket.

The new N. E. C. A. plan will encourage the retailing of electrical merchandise by contractors, and the broadened association movement is expected to be the means of showing the industry at large what power resides in the retail-distribution side of the business, a force that to-day is not recognized.

The new plan of conducting the association will also eliminate from general meetings all routine questions concerning the conduct of the association, leaving the time of members free for the discussion of the practical questions of the industry and of subjects involving their individual business problems.



J. R. STRONG, New York City
Past-President N. E. C. A. and Member of
Constitution Committee

All Sections of Country Should Be Represented at New Orleans

L. K. COMSTOCK, New York
President Conference Club, President L. K.
Comstock & Company

To all forward-looking and constructive reforms there will be objectors—some moved by one detail and some by another. In the nature of things no reform movement can be perfect, but the



L. K. COMSTOCK, New York City
President Conference Club of Electrical
Contractors

Goodwin plan is certainly the best and most constructive that has been offered. Surely no one in the industry can fail to derive benefit, and therefore profit, from a movement supported by all in the common interest of all.

Every electrical contractor, from coast to coast, ought to inform himself of the main outlines of the Goodwin plan, and then see to it that his section of the country is properly represented at the New Orleans meeting, with the idea of reforming the Association to bring it into proper alignment with this new idea.

Let no one suppose that this idea when once adopted will of itself accomplish wonders in the industry. It must be steered and engineered by organized leadership of the highest order obtainable. This will cost some money and the members of the National Association must create an executive committee in whom it has confidence, and then empower that committee to take all steps necessary to put this plan into operation. If this plan be adopted, gratifying results are bound to follow.

Will Do Anything Possible to Promote Movement

ERNEST FREEMAN
President Freeman-Sweet Company, Chicago.
Past-President N. E. C. A.

I am so inactive and out of touch with present workings of the National Electrical Contractors' Association that I

do not feel like expressing an opinion on the plans for reorganization. These are matters for men who are devoting time to association work.

I am heartily in favor of the Goodwin movement and will do anything possible to help promote it.

Dealer - Contractor Movement Deserves Support of Manufacturers and Jobbers Also

W. K. TUOHEY, Springfield, Mass.
First Vice-President, N. E. C. A.

The electrical dealer is and should be the logical distributor of electrical merchandise. It seems so unnecessary to present arguments in favor of this statement that I believe it can be accepted as an established fact.

If this be true, and keeping in mind the almost unbearable conditions prevailing for many years past, there is no reason why every dealer—and for that matter, manufacturer and jobber also—should not give his cordial approval and enthusiastic support to any movement that promises a change for the better.

The so-called Goodwin plan, with which I am somewhat familiar, seems to offer a practical solution for many of our problems. Mr. Goodwin, apparently, has given much time and study to the matter and has gained thereby a comprehensive knowledge of the true situation from which he has proceeded to develop his ideas. If it is possible to secure the sincere support and continued adherence of manufacturers and supply dealers for his program it seems reasonable to look for successful results in the near future.



W. K. TUOHEY, Springfield, Mass.
First Vice-President, N. E. C. A.

Electrical Contractor Is Missing a Great Opportunity if He Puts Off Taking Up Merchandise Sales

NEIL C. HURLEY
President, Hurley Machine Company, Chicago

Being familiar with the Goodwin movement on the Pacific Coast, I endorse in every particular the plan to federalize the National Electrical Contractors' Association.

I believe the electrical contractor is missing a great opportunity every day that he puts off going into the retail selling end of the electrical business. The housewife and everyone else looking for electrical appliances naturally turn to the electrical dealer to supply their wants. In a great many cities now it is necessary for the hardware dealers and other merchants to carry electrical goods because the local electrical contractors do not carry goods of this kind.

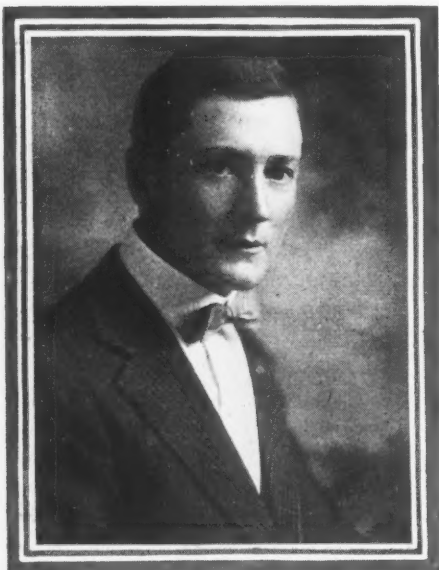
Surely, any city can support a retail electrical store, and we are encouraging and helping this movement all we can, as we believe it the proper channel through which to sell electrical appliances.

Movement Is All for the Good of the Contractor-Dealer

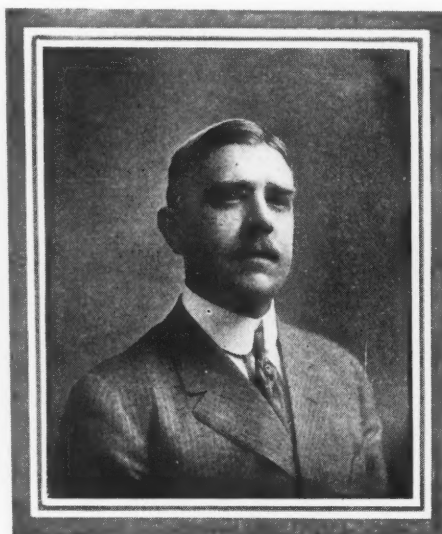
J. C. RENDLER
Southern California Electric Company, Los Angeles, Cal. Second Vice-President, N. E. C. A.

Having been in personal contact with W. L. Goodwin for the last few years, I know him to be a man possessed of excellent ideas and the courage to properly execute those ideas. The "Goodwin movement" as I view it, is all for the good of the contractor-dealer, and I firmly believe from what I have seen of its operation on the Pacific Coast that by combining all of the contractor-dealers in the United States in this new movement it will be the means of placing our business on the plane where it rightfully belongs.

I trust that the wisdom of those present at the New Orleans convention will be exemplified by the adoption of the new constitution.



J. C. RENDLER, Los Angeles, Cal.
Second Vice-President N. E. C. A.



PAUL H. JAEHNIG, Newark, N. J.
Executive Committeeman N. E. C. A.

New Merchandising Plan Is Solution of the Contractor's Difficulty—Bound to Succeed

P. H. JAEHNIG, Newark, N. J.
Executive Committeeman, N. E. C. A.

When the Goodwin plan was first outlined to a few contractors and dealers in Newark, a few months ago, it seemed so revolutionary in character and so much at variance with long-established methods of conducting the electrical contracting business—and at the same time it seemed so practical and desirable—that all who heard it wondered if it were possible to put such a plan into execution.

As a result of the deep interest aroused and the wonderful possibilities of the plan, the first meeting was soon followed by other and larger gatherings of deeply interested contractors and dealers, resulting in the adoption of the new plan by the Electrical Contractors' Association of New Jersey, at an enthusiastic meeting on July 14. At this meeting a new Constitution and By-Laws in conformity with the Goodwin plan were unanimously adopted, making New Jersey the first State east of the Rocky Mountains to officially fall in line with the new movement.

That the electrical trade has been waiting for a movement of this kind is shown by the enthusiastic manner in which the new plan has been received wherever presented, and its success is practically assured.

Membership in the N. E. C. A. is a business asset which every electrical contractor should possess; an asset that will so increase in value with time, that he cannot afford to conduct his business without it.

"Only Hope It Will Soon Hit Our Town"

JAMES F. BURNS, Schenectady, N. Y.
Sergeant-at-Arms, N. E. C. A.

In regard to the Goodwin movement, I feel it will be a grand success. In fact, I only hope it will hit Schenectady some day, for we need something like it very much.

Testimony from Oregon Where Cooperation is a Fact

J. R. TOMLINSON, Portland, Ore.,
Pierce-Tomlinson Electric Co.

We completely reshaped our State association on the lines suggested by Mr. Goodwin and from that day the situation has been decidedly better. We have many problems yet to solve, but the spirit and morale have so completely changed that as each question arises for consideration, whether with central station, manufacturer or jobber, it is approached from both sides in a more considerate, rational and conciliatory manner, in contrast to past attitudes.

I have read with much interest the articles ELECTRICAL MERCHANDISING has been running relative to the work of the committee on re-organization of the N. E. C. A., and if they have their work completed ready to be submitted for consideration of the convention at New Orleans the question will probably be the most interesting and momentous one ever to come before the association.

Let Contractor Take Rightful Place in Distribution of Electrical Goods

E. W. ROCKAFELLOW
Assistant General Sales Manager, Western Electric Company, New York

I believe that electrical devices should be sold by electrical people, and that the natural distribution is through the retail dealer—or contractor, as we call him in the trade.

On account of the present high costs of electrical materials used in residences and office buildings the contractor is facing a dull period in the lines that have heretofore been his mainstay for a living. Therefore, this is the time for him to turn his attention to study of the retail merchandising question, with a view of taking his rightful place in the distribution of the ever-growing number of electrical devices that have become economic necessities to the public.

The movement to federalize the national contractors looks to me like the first step to bring this about, and I hope it will succeed.



E. W. ROCKAFELLOW, New York City
Assistant General Sales Manager Western Electric Company



M. G. BUCHAN, Cleveland, Ohio
Chairman Convention Committee N. E. C. A.

Every Contractor-Dealer Has Waited Years for This Movement

M. G. BUCHAN, Cleveland, Ohio
Chairman Convention Committee, N. E. C. A.

The Goodwin plan of reorganization is something every electrical contractor-dealer has been looking forward to for years. They have only been waiting for a man of the calibre of W. L. Goodwin to put it across.

Every national association—be it of electrical contractors, jobbers, manufacturers or dealers—should have as its members every concern engaged in its particular line of endeavor, and not merely a few of the leaders.

Mr. Goodwin seems to be the one man in the electrical industry that has the "dynamic force" to carry this proposition to a successful culmination, and it is to be hoped that every man interested in the upbuilding of the electrical industry will put his shoulder to the wheel and lend his utmost co-operation.

Local and State Associations Should Be Responsible to the N. E. C. A.

JOHN W. HOOLEY
Contracting Electrical Engineer,
New York City

Practically every electrical contractor belongs to some lodge or fraternal organization for the social or material benefits he derives therefrom.

Yet a large percentage of these same electrical contractors do not become members of any electrical contractors' association.

No one contractor possesses all the knowledge or knows all the wrinkles of the game. If each contractor would only "mix" and talk with his competitors he would find solutions for many of the perplexing problems that confront him from time to time.

The contractor must realize, whether he wishes to or not, that his competitor's success is his success, and as long as the competitor is to remain a competitor—why not try to make him a good one?

But the electrical contractors' associations should be centered in a national body, with State associations responsible to this central head, and local associations responsible to the state bodies. Members should be under bond to their local organizations, the "locals" under bond to the state organizations, and the state bodies under bond to the national association.

The sooner this is accomplished in a thorough manner the sooner will we enjoy some of the benefits that are bound to follow from this logical distribution of responsibility.

Benefits of Organization to Big and Little Fellows Alike

H. B. KIRKLAND
Vice-President, The American Conduit Manufacturing Co., Pittsburgh, Pa.

It seems to me that the whole question of the distribution of electrical supplies is bound to go through a big change in the next few years. Therefore the plan to federalize (or to reorganize with a new constitution) the National Electrical Contractors' Association will help to correct many of the evils from which every branch of the industry has suffered.

Being a strong believer in organization, I am one hundred per cent for the Goodwin plan, because it will bring about a better understanding between branches of the industry that are now conflicting.

Surely great good will be derived by "getting together." With the big fellow helping the little fellow with his problems, and creating a good feeling that will stimulate trade, benefits are provided which may be enjoyed by big fellows and little fellows alike—for no matter how "little" or how "big" a man may be, he gains by being organized.

I think the Goodwin plan offers unlimited possibilities and hope the new constitution will be adopted by the convention at New Orleans next month.



F. W. LORD, New York City
President Lord Electric Company

Competition—Combination—Co-operation

F. W. LORD, New York City
President Lord Electric Company

After having been in business nearly twenty-five years, I can say that I have been more inspired by the possibilities of the movement inaugurated by W. L. Goodwin toward co-operation in trade than by any other business idea.

We have all read in the text-books that "Competition is the life of trade," and, of course, competition is healthy except when it degenerates into the predatory or cut-throat variety. There always will be competition, and no intelligent business man would wish to entirely do away with it.

By a process of evolution business men now seek to improve conditions by co-operation, and it is co-operation of the very best sort that Goodwin advocates. I have heard him talk on this subject a great many times, and each time he adds something new to what he has said before; but through it all runs the same convincing idea that what he recommends is not only to benefit the manufacturer, the distributor and the contractor-dealer, but the public as well.

This is the sort of co-operation which the government and everyone else favors because it hurts no one and helps all. The only way this is possible is by the elimination of waste and the saving of economic lost motion.

Formerly, after having closed his contract, the contractor's efforts were centered on employing the same tactics on the manufacturer and wholesaler as the general contractor had practiced on him—a condition only too well understood by all.

A better time is coming, I feel, in which fair prices will tend to be established by co-operation, both in the buying as well as the selling end of the business. The contractor may then spend his time and energies developing his business and the industry along legitimate lines and in the giving of service instead of cheapening the work in order to obtain just a scant living.



H. B. KIRKLAND
Vice-President American Conduit Manufacturing Co., Pittsburgh, Pa.

THREE-PLY SALESMANSHIP

The Brass Tack Brigade Learns That It Must First Sell the Desire for an Appliance,
Then the Appliance Itself, and Finally the Use of the Appliance
Before the Sale Will "Stick"

By FRANK B. RAE, Jr.

"GLAD you got in this week," said Davis, commercial manager of the Combination Gas & Electric Company, offering me a handshake with his right and a cigar with his left. "This is the week of the big diddings; the Chief is having all the company's department heads out for a junket on his yacht—sort of a get-together party—but we manage to hold two or three pretty important meetings. If you can join us, I'll get you an invitation."

Next day we started. Besides Mr. Dowd, the general manager, there were Randall, the chief engineer; Elliott, in charge of distribution; Scribner, the advertising man; Grubb, the auditor; Davis, myself and—last and best—Lieutenant Micky Daly, former star salesman of the company, who had just completed his training course at Plattsburg and was back for a week before joining his men.

We piled aboard the old *Unome*, a sort of sea-going bungalow of a type unknown to naval architecture but roomy and convenient—and in half an hour were far enough down the bay for the rabid watermen to begin to think about fish.

To me nothing is more remarkable than a gathering of business men at play. The good such a meeting does is incalculable. It brings men together on the basis of their manhood, their intrinsic good-fellowship. The lines of caste fade, suspicions vanish, men learn to respect each other as *men*, and not according to business title or the size of bank roll. If I had a competitor I should want him to go fishing with me and call me by my front name, for thereafter I would know him as a "clean" competitor and would not fear him. And, similarly, if I were manager of a big organization I would see to it that my men played together a few days every year, for that would be guarantee against internal strife and friction in my company. Nobody has ever given a very good explanation of why this is so—we simply know that it is so.

The yacht party on the old *Unome* was simply another instance of this.

* * *

THE big "talkfest" of the trip started quite by accident. The fish were not biting well, a dozen lines with a dozen different forms of tempting bait had failed to bring more than an occasional nibble. Micky, in the rôle of "temperance barkeep," was



"Why did the range campaign fail?" repeated Davis. "Why do all range 'campaigns' fail?"

"Because it was a *campaign*, that's why. We started out like a whirlwind. We advertised to beat the band and had a thousand people in to our demonstration. We put a hundred and eight ranges out on trial and we got a hundred and twelve back. It is a plain fact that whirlwind methods will not succeed with a proposition like a range."

experimenting with the contents of the ice box; Grubb had fastened his line to a backstay and was reading; Randall was drying out his tobacco on the galley stove, and Dowd was cleaning the few fish caught.

"What's the matter with the range business?" asked Elliott. "You fellows got me to waste a lot of copper and transformers to strengthen the lines over on the East Side, but I don't hear much about results."

"Oh, blooey!" sighed Davis. "Why does somebody always take the joy out of life? The answer, old pole-climber, is that I am a blithering idiot. The range campaign skidded into the ditch."

"Why did it fail?" repeated Davis. "Why do all range 'campaigns' fail?"

"Because it was a *campaign*, that's why. We advertised to beat the band and had a thousand people in to our demonstrations. We put a hundred and eight ranges out on trial and we got a hundred and twelve back. It is a plain fact that whirlwind methods will not succeed with a proposition like a range."

"It is my observation," commented Dowd, "that an electric range must be sold three times to the same housewife before it is really sold at all. The first sale is to sell the *idea* of electric cookery; the second is to get the order for the range itself, and the third is to sell the method of operation. It's very much like a flying machine: What good would it be to sell an airplane on trial to a man who only knew how to drive an automobile? Piloting an airplane and driving a motor car are about as much alike as cooking on a coal stove and cooking by electricity."

"Weren't your prices too high?" asked Elliott.

"Too high? No, too low. That was another mistake we made," continued Davis. "We thought that we'd have a better chance to introduce ranges if we sold 'em at cost plus a rock-bottom installation charge. The fool public didn't appreciate our generosity at all. They didn't know whether they were being 'stuck' or getting a bargain. A price concession is no good unless the public has a basis for comparison."

"Ye mind I sold wan o' them stoves, Chief," said Micky. "'Twas th' next mornin' afther a hard night with th' Killarney Chowder an' Marching Club av th' First Ward. I misread th' price card and sold wan fer \$90 that shud ha' been \$60. Th' customer niver knew th' difference an' was perfectly satisfied until I called around t' give back th' \$30. Thin, by th' saints, she bawled me out fer a Jew swindler an' towld me to take th' stove away intirely."

"Another point about that cut-price game," went on Davis. "It put us

where we had to play the part of the anvil in the anvil chorus. Every electrical dealer, contractor, hardware shop and department store in town began knocking the electric range."

"Why?" asked Randell. "These fellows never sold an electric range in their lives, and they can't afford to until electric cooking is as common as electric sweeping."

"Precisely. That's the way I figured—only I was wrong. These fellows aren't in the electric-range business now and they would never start it, but they want a chance at it after it gets going. They figure that if we establish cut prices, they can't ever get in. And, when you stop to think about it, they are right."

"Speakin' of th' knockers," said Micky, "do ye mind th' crafty trick owld Hardpan played us? He advertised in th' want colyums av all th' papers for to buy second-hand coal an' gas stoves. Whinever we placed an electric range on trial, the customer w'u'd right at once figure how could she cash in on th' old stove, and she'd sooner or later see this here want ad. An' whin she answered it, owld Hardpan w'u'd sind up a clever salesman, an' th' woman w'u'd take him out into

I COOK BY WIRE
by a twist of the switch



The ELECTRIC RANGE
Sanitary—Modern—Economical—A Cool Kitchen

MORE REASONS
No sooty pots - modern comfort - convenient.
Less work and better results.
Every burner is controlled separately - By a simple twist of the switch you have high, medium, or low heat - fast or slow cooking - just as you please.

DEMONSTRATIONS DAILY
from 10 AM to 1 PM and from 2 PM to 5 PM
Main Office 1214 E. Locust Sts.

INTRODUCTORY OFFER
We guarantee The ELECTRIC RANGE will perform satisfactorily the work for which it is sold - in case it does not and we are so notified within 45 days from date of installation, we will remove the range at our expense and refund all money paid thereon.

PURCHASE TERMS
10% of the purchase price of range selected, with order - balance in 11 equal payments with the next 11 bills for electric service - or less \$50 for cash with order. Installation free.

THE CENTRAL STATION MAN'S IDEA OF A GOOD RANGE ADVERTISEMENT.
It recites the arguments which appeal to the central station man and does not take into account the housewife's viewpoint.

This is the central station man's idea of a good range advertisement. It recites the arguments which appeal to the central station man and does not take into account the housewife's viewpoint.

th' kitchen t' show him th' owld stove, an' he'd see th' electric range. 'Howly saints!' he w'u'd yell; 'an' are ye afther riskin' yer life with wan av them electrocutioning contraptions?' 'Why, it's th' latest thing,' she w'u'd answer. 'Yeh,' sez he, 'an' you'll be th' late Mrs. Jones very soon.' 'Why, the electric company tells me it's perfectly safe,' sez she. 'Yis, an' th' electric company tells ye yer bills is small when ye know they're big. As fer me, I w'u'dn't let me wife touch wan; she's a delicate woman, an' a shock off of wan o' them things w'u'd probably be th' death of her.'

"Well," continued Micky, "in about six minutes that woman w'u'd be scart to be in th' same room with an electric range. Thin the son-av-sea-cook w'u'd up an' tell her that what she really wanted was a modern coal stove, wan av' thim stoves with a lot av trimmins onto it. He didn't blame her fer wantin' to be shut av the owld range—it were a pretty cheesy pile av junk, he'd say. But, nivertheless an' notwithstanding, he w'u'd allow her \$10 for it if she'd buy a double-deck, six-cylinder, plush-upholstered coal stove. An' nine out of tin did. Our electric range campaign was a fine success fer

owld Hardpan; it sold twinty or thirty big coal stoves for him."

"I'm not convinced that our advertising for that range campaign was very effective," suggested Dowd.

Scribner, the advertising man, braced himself to a defense of his work, but Micky beat him to it.

"Th' advertising were as punk as th' rest av th' campaign," he agreed. "While I was up to Plattsburg, I got th' home papers an' I used t' study them there ads. Wan in particular got my goat entirely. I cut ut out."

Micky dug into his blouse for a ragged card case from which he extracted the clipping in question.

"Look at ut!" he exclaimed.

"What's the matter with that ad?" demanded Scribner. "I claim it's at least fair—nothing inspired or wonderful, but a good, straight ad that says what we mean."

"Scribby, me bhoy, I know ye won't take offense at me criticisin' of this here ad, but honesty compels me t' say that it smells like a dead fish. Did ye, now, iver try translating wan of these here ads into some other line av business. Fer example, suppose ye change this from a range ad to a kodak ad—listen how beautiful an' convincin' ut becomes:

"I TAKE SNAPSHOTS
by simply pressing the bulb"



The POCKET CAMERA
Non-Poisonous—Modern—Economical—A Beautiful Album of Pictures

MORE REASONS
No cheap-looking tintypes, modern accomplishments, easy. No trouble and better results.
Every exposure is controlled separately. By a simple movement of the lever you have snap-shot or time exposure, just as you please.

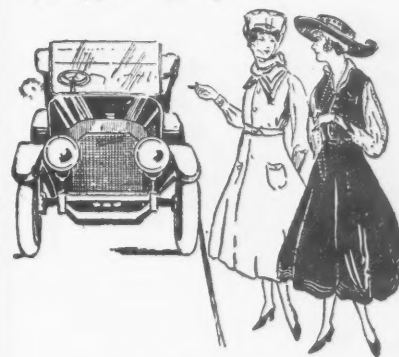
Demonstrations Daily

INTRODUCTORY OFFER
We guarantee that the Camera will take pictures—in event it does not, we will take it back and refund your money.

PURCHASE TERMS
10% of the purchase price with order and the balance in 11 equal payments with the next 11 rolls of film you buy.

Translate the above range advertisement into the language of the camera manufacturer and observe how flat the argument falls.

"I TRAVEL IN AN AUTO—
by simply feeding her gas."



The AUTOMOBILE
Bug-Proof—Modern—Economical—
No Jolting

MORE REASONS

No germ-infested car tickets, modern comfort, convenient, easier than walking. The speed can be controlled—by simply shifting gears and stepping on or off the accelerator you can go fast, medium or slow, just as you please.

INTRODUCTORY OFFER

We guarantee that the automobile will run. In event it does not and you tell us about it, we will refund your money.

PURCHASE TERMS

10% of purchase with order and balance in 11 installments with the next 11 bills for gasoline.

Or apply it to the advertising of an automobile. Can you imagine yourself buying a "tin Lizzie" on the strength of this?

"I take snapshots—by simply pressing av th' button.

"The Pocket Kodak—non-poisonous, modern, economical, a beautiful album av pictur's.

"More Reasons—no chape-lookin' tintypes, modern accomplishments, asey.

"No throuble an' better results. Ivery exposure is conthrolled separately, by a simple movement av th' lever ye kin have a snapshot or time exposure, jist as ye please.

"Dimonstrations daily.

"Introductory offer—we guarantee that th' Kodak will take pictur's—in event it does not, we will take it back at wanst and refund yer money.

"Terms—10 per cent av th' purchase price with order and th' balance in eleven equal payments with th' next eleven rolls of fillum ye buy."

* * *

SCRIBNER was angry at first, but the little Irishman's criticism was so good-natured that he laughed with the others.

"Ye can take th' same ad and apply it to an autymobile, or a gas range, or a ukelele, or a lawn mower," concluded Micky. "Th' point is that yer

so close to yer own proposition that ye can't back away and look at ut from th' angle av the guy what's waitin' to spind his money."

"Well," said Elliott, "you fellows have told me a lot about how and why you haven't sold any ranges to speak of, but you haven't said what you are going to do this fall. Am I to take down my heavy feeders and big transformers?—are you going to quit on ranges?"

"Quit?" snapped Dowd. "Absolutely no! We are going right ahead. We are going to bury our mistakes right here in the bay, and we are going back to start new. We are going to sell not only ranges, but we will sell every other labor-saving household device that consumes current.

"For the last year we have all been busy on individual applications of electricity—power, factory lighting, protective floodlighting, industrial heating. This year we are going to work for household efficiency—for lightening the labor of the home. That is our big opportunity, and it is also our patriotic duty. America's household tasks must be lessened. Electric household helps must solve the servant

problem. With 1,000,000 men under arms, with women being drawn into industry, we must make housework as nearly automatic as possible.

"Our failure with electric ranges has taught us a lesson that we'll profit by. It has taught us that we must plan more carefully—that our propositions must be sound and practical, and our prices right so as to win the co-operation of dealers. It has taught us that our advertising must be efficient.

"It has taught us, above all, that we cannot continue blandly to work in the same old rut, but that we must study each piece of merchandise carefully and develop a selling method that will stand the acid test of practice.

"No, Elliott," concluded the Chief, "we are not going to quit. We are going to make the housewives of our city realize that electricity is the great servant industry—that with electricity she can do her home tasks in less time, with less effort and at less expense—that electricity will, in very truth, lighten the labor of the home."

* * *

THAT night Micky and I lay on deck watching the stars.

"'Twas a fine line av bunk th' Chief talked to us th' day—yet 'twas no bunk at all. Ye got to see results in yer mind's eye before ye can make 'em come true.

"Th' trouble, I'm thinkin' with most men is that they don't ever get a Big Idea. They wander along, selling a 25-watt lamp here an' a quarter-horse motor there with never a thought for anything more thin a few cints av profit. But th' Chief, now, he sets about reformin' th' nation's system av housekeepin', an' in tryin' to put th' Big Idea acrost he will sell \$100,000 av devices.

"Th' guy with th' peanut brain says, 'Rejuced sale av flatirons,' an' he gets three dollars an' twenty-nine cents av somebody's coin. But th' Chief says, 'Lighten th' labor av th' home,' and right away gets three hundred an' twenty-nine dollars from th' same dame fer a complete electrical equipment."

"The difference being one Big Idea," I suggested.

"The difference," corrected Micky, "being one Big Idea and three hundred an' twenty-five dollars an' sivinty-wan cints in cash."

COST\$ AND CASH

By C. L. FUNNELL



ONCE there was a man who had an electrical store and a contracting business. He did lots of work and he sold lots of goods, but his bank account failed to develop obesity, and sometimes he had to pay the grocer out of the cash till. So he told his story to a Gent who worked for an efficiency company and made regular money.

"Tell me," said the Gent, "how you estimate on a wiring job."

"Well," said the man, "I figure the important stuff roughly, and add about so much for elbows, straps, solder and other stuff that may come up later."

"How often does your store stock turn over?"

"I dunno."

"Which line of goods nets you the highest profit?"

"You got me."

"Suppose you have a line of stuff you want to close out; what do you do with it?"

"If I can't sell it I just put it somewhere out of sight."

"What does it cost you to do business?"

"Search me?"

"Well, I'll be darned!" said the Gent. And then he said a Lot of Things.

The Man took his advice, and now when he estimates on a job, he estimates—and doesn't guess. He knows what each line of goods brings him in the store, and how often his simoleons do summersaults. Of course he has to have a bookkeeper, but the latter more than saves his salary. If the public stops wanting Blazo flash lamps he doesn't hide 'em back of the furnace. He advertises a special sale and gets some of his money back on them. And if his overhead gets high he knows it, and finds the leak. Which are some of the reasons why he will move into his beautiful new home overlooking the river very soon.



The customer who comes into the store of the Haenig Electric Company, Springfield, Ill., to ask about having his house wired, can get a price on the job, sign a contract for the work, and leave the place in fifteen minutes.

"To Labor and Material Costs Add 50 Per Cent"

How the Haenig Company of Springfield, Ill., Has Arrived at Unit Cost Figures for Average Work, Which Saves Time and Expense in Making Estimates

By L. C. SPAKE

WHEN a man comes into the electrical store of the Haenig Electric Company, Springfield, Ill., to ask about having his house wired, he can get a price on the job, sign a contract for the work and leave the place in fifteen minutes. With the Haenig Company this is not an unusual procedure, but is a matter of routine which is followed out in connection with most of the old-house wiring jobs done by the company.

In speaking about the plan which has been worked out to permit the store clerks to figure house wiring, John E. Haenig said: "The plan we use in estimating the cost of wiring one to three-circuit knob-and-tube jobs for old-residence work is quite simple. Springfield, just like most towns, has a standard for electrical installation, which makes it easy to arrive at the net average cost of the several items entering into ordinary house wiring. The Springfield regulations require that all service switches and cut-outs be installed in a certain way, and that no feed wires be

smaller than No. 10, and that all outlets, etc., must be installed to conform to the standards of the National Board of Fire Underwriters.

"This made it easy for us to arrive at our net cost. We had our men keep their time and material separate on each item for ten or more jobs, so we could strike a true average. This we have found from experience to be the most accurate way of figuring this class of work.

"Our experiment showed the cost of the various items to be as follows:

NET LABOR AND MATERIAL COST	
Service connection	\$7.50
Ceiling-light outlets	1.00
Wall-light outlets	1.25
Wall-receptacle outlets	2.25
Basement conduit outlets	2.50
Single-pole snap-switch outlet	1.50
Single-pole flush-switch outlet	2.00
Three-way snap-switch outlet	2.00
Three-way flush-switch outlet	2.50
Inspection	

"While this schedule is correct for our conditions in Springfield, each contractor should work out his own schedule, taking the cost of his labor and his standard construction methods into account.

"Each clerk has a copy of this schedule. Suppose, for example, that a customer comes into the store who has an old house with a front porch, hall, parlor, dining-room, kitchen, basement, two bedrooms and bathroom.

"The clerk lists these, and in a few minutes' conversation brings out the number of lamps the customer wishes to have installed in each room. The method of listing is given in the following example:

Front porch	1 ceiling outlet	1 flush switch
Hall	1 ceiling outlet	2 three-way flush switches
Parlor	1 ceiling outlet	1 flush switch
Dining room	1 ceiling outlet	1 flush switch
Dining room	1 wall receptacle	No flush switch
Kitchen	1 ceiling outlet	1 snap switch
Basement	1 ceiling outlet	1 snap switch
Bedroom	1 side outlet	No switch
Bedroom	1 side outlet	No switch
Bathroom	1 side outlet	No switch

"From this tabulation it is easy for the clerk to figure the wiring cost. He finds he has five ceiling outlets at \$1 each and three side outlets at \$1.25 each, so he makes a tabulation like that shown on page 128.

"From this table it will be seen that the net cost in labor and material

Service	\$7.50
Five ceiling outlets, at \$1.....	5.00
Three side outlets, at \$1.25.....	3.75
One wall receptacle, at \$2.25.....	2.25
One basement outlet, at \$2.50.....	2.50
Two three-way flush, at \$2.50.....	5.00
Three single-pole flush, at \$2.....	6.00
Two single-pole flush, at \$1.50.....	3.00
Net labor and material.....	\$35.00
Add 50 per cent for overhead and profit	17.50
Consumers' cost	\$52.50

to the contractor is \$35; by adding 50 per cent for overhead and profit the clerk arrives at the billing price of \$52.50."

In commenting upon this method of figuring Mr. Haenig expressed the opinion that the service cost is prac-

tically the same in the average job regardless of the fact that the number of switches and outlets may vary. The charge for the service should, therefore, be figured as a separate item, and not prorated with the outlets. Mr. Haenig said further that this system can be worked out by contractors for figuring not only old house wiring, but also on other lines of work, and will effect a saving of 50 per cent over the time required for estimating by the old method. Moreover, it frequently permits clerks at the electric shop to secure contracts which otherwise might not be secured at all.

the same time could hardly afford this additional expense.

There are various features that increase the difficulty that arises if the entire bill of material is sent to the job at the time of starting. These factors may be enumerated as follows:

1. Storage place for material.
2. Theft of material.
3. Correction of estimates of material.

The storage of material is a large factor when the work is done in a new building that is only half finished. The weather condition might ruin the material before it could be used. There is always danger of theft on new material and tools which would considerably hamper the work and cause a direct loss of money. Moreover, if the entire lot of material is sent to the job at once and a mistake has been made in the estimate, the expense of the job is increased. But if the material is sent as it is needed a correction can easily be made by the foreman in charge of the work. Instances of this are shown when the wrong type of outlet box is sent to the job or a certain size of conduit must be substituted for that of another size previously called for.

The general character of the community and the size of the individual contractor's business will always be large factors in determining what systems of handling men and material will be most economical for him. But regardless of local conditions and regardless of the size of his business, each contractor should have some system. His men and material should not go to the job in a shoddy "hit-or-miss" fashion.

Methods of Handling Men and Materials

Ideas That Have Proved to Be Time and Money Savers for Electrical Contractors in Chicago

ALTHOUGH electrical contractors use many different methods of supplying material and tools to the job, the most important feature is to have everything in readiness at the time the men are to commence their work.

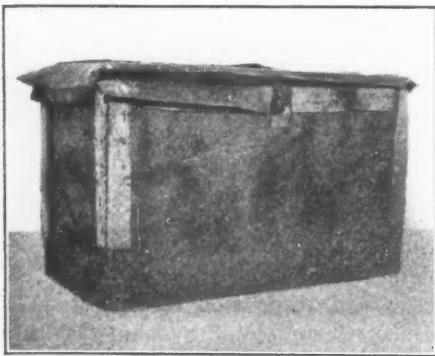
The Freeman-Sweet Company, contracting electrical engineer, Chicago, employs a system in which the workman has nothing to do with getting the material to the job. When the work is to be started, a requisition slip is made out at the office and sent to the man in charge of the supplies at the company's storeroom. This supplyman sends the tools needed and the materials to be used to the job at the time of starting. The foreman of the job receives a key to the tool box, and when the job is completed he gives the key to the supplyman, who

in turn has the tools returned to the storeroom.

STOCK TICKETS BASED ON ORIGINAL ESTIMATES

The Henry Newgard Company, electrical contractor, Chicago, has tickets made out from the estimate of the job. One copy goes to the supplyman, one to the foreman of the job and one to the shop, if work is to be done there. Sufficient material for the rough part of the work is supplied to the job and thereafter the foreman telephones to the supplyman as the material is needed. Supervision is made at least every two days and a check is kept of the supplies sent to the job and the work completed. Benjamin Olsen, one of the superintendents in charge of this work, states that in his opinion a contractor employing as few as fifteen men should have a man in charge of the supplies.

The reason for this is that fifteen men would be scattered over five or six jobs with a foreman for each job, and if each foreman were to go to the various supply houses and get his own material, 25 per cent of his time would be wasted. Also the delays in delivery would be more numerous than when a competent supply man is on the job. Moreover, the wiremen are paid between \$6 and \$7 a day, where as a supplyman can be obtained for about \$15 a week. Of course, a small contractor with one or two jobs proceeding at



The foreman on the job receives a key to the tool box. Later, when the job is finished, he returns the key to the supplyman, who in turn sends in the tools to the main office.

FREEMAN-SWEET COMPANY 808 N. DEARBORN STREET		Date: 7/5 1917
Deliver To: John Smith		Job No. 71
Address: 71-79th Place		
750 ft. #14 B. X. V. wire 210 ft. #14 single B. X. W. wire 70 ft. #10 B. X. 18" Bushings 10 ft. 1/2" Enamel Conduct 75 ft. 1/2" Enamel Conduct 30 ft. 1/2" Enamel Conduct 75 ft. #18 Reinforced Cord		
Stock Ticket No.		Signature: Ed Harris

This is a copy of one of the requisition slips made out in the office, and sent to the man in charge of storeroom supplies.

MODERNIZING THE "PROSPECT" LIST

The Finest Booklet in the World Cannot Convince a Man Who Has Died or Moved Away. To Get Full Benefit from Direct-by-Mail Appeals the Mailing List Must Be Revised Up-to-the-Minute

By CLARA H. ZILLESSEN

THE Big Boss chewed the end of his cigar and thought. "Jim," he said finally to his sales manager, "there's something lacking in this housewiring campaign of yours that's going to hold it back from being a big success. What is it?"

Jim Holton looked long and carefully at the data and copy spread out on the table in his chief's sanctum. He had burned many a midnight mazda on the plan for this housewiring campaign of his; and he had looked at this child of his brain and found it good. Now, he studied it again. Wherein lay the reason for the boss's question and his quizzical smile?

LETTING THE SALESMAN ANALYZE THINGS FOR HIMSELF

Surely, he had mapped the thing out carefully enough. There were the three preliminary newspaper ads to explain the proposition; there were also the letter, the folder and the booklet he had prepared for direct mailing to his prospects; there were the working sketches of the window displays he contemplated—to say nothing of the clever sales plan he had worked out to get his prospects interested. No; so far as he could see, the plan was complete.

"I don't see it," said Jim. "What do you mean?"

He had a sneaking hope that after all the Big Boss might have stumbled on some unimportant detail which could easily be remedied.

But the "Chief" had become the big man he was by understanding human nature, and his method was to train his men to analyze things for themselves. "I'm not going to tell you, Jim," he said, "but I'm going to give you a hint and then I want you to go back to your office and work this thing out.

"You remember the other evening," he continued, "when we had to wait for that freight to pass up the line and the station master told us that most of it was made up of cars loaded

with ammunition for the Allies? Did it occur to you, then, that if peace should be declared while that shipment was in transit the Allies would have no way to use that ammunition, because they wouldn't have anybody to shoot it at? Well, you've got some sort of the same situation here with this housewiring campaign of yours. At least, you can count all this dope here as ammunition—and I see you have it all routed, too; for here are the dates of the newspaper insertions and the mailing dates of the direct mailing stuff. *But whom are you going to shoot it at?*"

WHAT HAD HAPPENED TO THE LIST

Holton gathered up his papers. That was something to which he really hadn't given much thought. Where was all this carefully prepared and thought-out stuff of his going? Of course, he had a list of housewiring prospects. There were about ten drawers of names in the cabinet of the dusty addressing machine standing in the corner alongside the cashier's wicket. His predecessor, he had been told, had gone to a deal of trouble and expense to secure a housewiring prospect list, and he had naturally supposed that he would have to use it. But, as a matter of fact, he remembered now on thinking it over that he

hadn't really given that question of lists much thought—he had simply taken the mailing list for granted and had let it go at that.

But the boss's hint served the purpose. Instead of stopping that afternoon when the whistle blew, Jim Holton took off his coat, rolled up his sleeves and started to investigate his mailing list, and the first drawerful provided plenty of food for thought.

WHAT THE SEARCH DISCLOSED

"For the love o' Mike," he burst out, "why, George Jackson's been dead most a year, and the young people sold the old house before the newness wore off their mourning. And here's Sam Miller, who wouldn't have parted with \$100 to wire his house any more than he would have parted with his right arm, and his widow signed up for current six weeks after he was buried. And here's Joe Hutchins who signed up about six months ago—that's the fifth name in this one drawer where the house has been wired since this list was made."

By the time Holton had looked through five drawers, he felt he had a pretty fair idea of the run of his mailing list—the list to which he had intended sending hundreds of dollars worth of cleverly conceived, attractive and forcible advertising matter. His city wasn't so big that his list could change almost overnight; but the normal evolution of life—the births, marriages, deaths, changes of fortune and residence—all these things conspired to make his mailing list only about 40 per cent efficient. And what a woeful waste of advertising and sales effort that would have been! There would have gone on record another campaign failure; another central station man would have said: "You can't do anything with the people in this town—they're *different*."

FINDING THE REAL PROSPECTS

So Jim Holton decided that the thing to do was to confront the boss with a real mailing list, and next

Miss Zillesen, who has contributed a number of practical articles on selling and advertising campaigns to ELECTRICAL MERCHANDISING, has the responsible position of being in charge of advertising for the Philadelphia Electric Company. Prior to her work in Philadelphia, Miss Zillesen had much practical experience in the advertising and sale of electric appliances for the home, and for a time served as a member of the staff of ELECTRICAL MERCHANDISE, the forerunner of the present paper.

morning, as soon as the commercial men were gathered together, he turned to them and said: "Now, fellows, I want you all to turn to and give me a list of *all* the people in your respective territories who are good, fair and in-different housewiring prospects. And I want it quick. Go down the streets to-day where there are lines and list the prospects. Where you haven't the names just give me the block numbers and I'll get the rest from the assessors' lists."

It took a couple of days to complete the list, but it was worth the time and

energy spent; and when Jim Holton marched into the Boss's office with his list in hand, he felt that it was a good job. And the Big Boss looked up from his papers and grinned.

"Well, have you painted up your target?" he asked. Then he added more seriously: "I tell you, Jim, that's the trouble with a lot of these so-called campaign failures. You think because your town isn't a metropolis that there aren't many changes in the personnel of a mailing list—especially when you stop to think that a housewiring prospect list would naturally

consist chiefly of homeowners. But I want to tell you that we don't realize how rapidly the livest mailing list goes stale and what a difference six months or a year can make. It takes time and costs real money to get a good mailing list and then to maintain it in any sort of shape; but I want to say to you that unless you have that foundation of a really live list, at least 95 per cent correct, I'd just as soon have you cut out the direct advertising entirely and blow that part of the appropriation in on a couple of good dinners for the boys."

THE RELATION OF ESTIMATING TO BUSINESS POLICIES

By EDWIN L. SEABROOK

GREAT stress has been laid by many writers—and estimators as well—upon the rapid turnover of capital invested. How much business can be done—how many times can the capital be "turned over"—seems to be the desired aim. Three or four years ago the cost of conducting business, or "overhead," began to increase. To meet this a campaign developed in many quarters for frequent turnovers. "Meet rising costs with quick turnovers" became a slogan.

Many have taken the "turnover" too literally and estimated accordingly. They seem to think that overhead expense can be entirely eliminated by quick turnovers. The percentage (but not the amount) of expense, may be lessened by frequent "turnover," it is true, but there is no benefit derived from any business unless it earns the overhead and a profit. There is no greater fallacy than the belief that material and labor can be sold for less than these cost plus the overhead, in the expectation of making up the overhead by volume.

In a large Middle West city, a stationery house contracted to supply a big public service corporation with lead pencils for the invoice price plus 10 per cent. The amount of business was large and the stationery firm reasoned that this 10 per cent was all "velvet"; all overhead was eliminated when the goods were bought and delivered immediately to the purchaser. Later, the firm installed a very com-

plete cost-finding system. To their surprise they found that the public-service corporation lead pencil business was done at a loss and they gave it up.

"WHAT SHALL IT PROFIT A CONTRACTOR?"

In the haste to turn over capital—by taking contracts—many try to put over big sales or contracts without any overhead, throwing this burden



If any contractor feels that he must do "no-profit" business, let him be honest about it. Let him open an account with it in the ledger, call it "No Profit" or "No Overhead," or whatever he pleases.

But at the end of the year when the overhead is computed let this percentage be on the amount of business charged with it, but do not include the non-overhead accounts.

on the balance of the business and think the difference between actual cost and price received is velvet or profit. If an electrical contractor wires 100 houses a year and makes a fair profit on sixty, have the contracts (volume, or capital turnover) on the other forty benefited him or not?

If the overhead expense, as developed by ELECTRICAL MERCHANDISING, of the electrical contractor is 23 per cent of the selling price, or 35 per cent of labor and material, it is quite evident that this percentage must be added to *all* the contracts. If a portion of the business is taken on a smaller percentage, then a larger percentage must be added to the remaining portion. If anyone feels he must do this "No-profit business," let him be honest about it. Open an account with it in the ledger. Call it "No overhead" or "No profit," or whatever you please, but at the end of the year, when the overhead is computed, let it be on the amount of business that is charged with it, but do not include the "velvet" or "non-overhead" accounts.

No matter how rapidly the capital of the electrical contractor revolves or turns over, the overhead expense must get into the selling price before there is any profit. If this rapid revolving is carefully analyzed it will be found that the overhead is not reduced so much as is often believed. The amount of business, or contracts, does not reduce the overhead, and it

is useless to strive for rapid turn-overs unless a little of the transaction adheres to the bank account in the form of profit.

BUSINESS EXPANSION

The turnover of capital and business expansion are related. It is a most natural ambition to see the business grow larger every year; no one wants to stand still. But expansion may be profitable or unprofitable. No business should grow faster than the ability to handle it effectively develops in the owner. Expansion is profitable only as the growth is substantial and fits in with many other controlling factors. Many have catered to the ambition of expansion, have crippled themselves and retarded the development of the business for a long time.

The record of one firm, covering a period of six years, shows the fluctuating results of expansion without due regard to the factors that controlled the business. In one year this firm did a gross business of \$54,000 and made a profit of nearly 10 per cent, or \$5,000. The next year the expansion idea took hold of it and the business amounted to \$72,000, with a profit of \$3,900, or a little more than 5 per cent. The third year the contracts amounted to \$130,000, showing a profit of about \$10,000, or a little less than 8 per cent.

In the same city there were five other firms competing for the business. The expansion of the sixth firm was out of all proportion to the nat-



Business expansion is only profitable when all factors expand accordingly—ability to take care of the business, equipment, finance, expense, profit. The conservative estimator will take all these into consideration when making up the estimate.

ural increase of business in the community; consequently the amount of business secured by the other five firms began to contract. In order to get their share of the work these firms began to cut into the price. The expanding firm wanted all the business it could get, so it cut the price also. This trade war brought the business of the expanding firm the

fourth year to about \$99,000, with a profit of something like \$1,800, or less than 2 per cent. This was getting perilously near the danger line. The business for the fifth year was \$84,000 with a profit of less than 3 per cent, or \$2,300. The business for the sixth year was \$71,000, profit over \$3,000, or about 4 per cent.

The average profit for the five

done by many electrical firms on a large scale. These are equipped to handle the work in this way at a profit. If this class of work is not done exclusively it will be found that it carries its proportion of expense. If it requires a certain percentage to cover overhead expense on labor and material which the electrical contractor furnishes himself, a lesser per-



Many seem to think that "overhead" expense can be entirely eliminated by quick turn-overs. The percentage of overhead can be reduced, it is true, but the actual amount, of course, is not lessened by frequent turn-over, and one must remember that there is no benefit derived from any business unless it earns its overhead and a profit.

years of experimental expansion was \$4,200. The experiment demoralized the business for the "expanding" firm itself and for their competitors for months to come. How difficult it was to get back to the old standard need not be told. This expansion was undertaken on the theory that a large business could be done on a small margin, thus reducing the expense; the more business the less the expense and the greater the profit. Unfortunately the results did not bear out the anticipation. Expanding beyond the natural increase of business in the community forced it to be taken at a less allowance for profit than formerly.

Expansion is profitable only when all other factors expand accordingly: ability to take care of the business, equipment, finance, expense, profit. The conservative estimator will take all these into consideration in making up the estimate.

TAKING CONTRACTS ON A PERCENTAGE BASIS

Does it pay the electrical contractor to take contracts on a percentage basis? This depends on how well equipped the firm is to handle contracts of this nature and the size of the percentage. The firm with an overhead expense of 23 per cent. on total volume of business, or 35 per cent on labor and material is certainly not equipped to handle work for 15 per cent, nor 20 per cent on the bare cost of these.

Percentage basis contracting is

centage will not carry the contract through when these are not furnished, or it is erected on a percentage basis. The percentage contract demands supervision, bookkeeping, liability insurance, wear and tear on equipment, which must be paid for by the one performing the contract. This class of contracts is often taken on the theory that volume of business lowers the expense. Such contracts, it should be repeated, do not decrease



"Percentage-basis" contracting must carry its own "proportion of expense." If a certain percentage is required to cover "overhead" expense on labor or material which the contractor furnishes himself, certainly a lesser percentage will not carry the contract through when these are not furnished, or the job is installed on a percentage basis.

The percentage contract demands supervision, bookkeeping, liability insurance, wear and tear of equipment—all of which must be paid for by the one performing the contract. A percentage basis will be found profitable only when its just share of overhead expense and profit are included.

the amount of expense; they may lower the percentage of expense. The amount of expense and percentage of expense of conducting business, or overhead, are two different things. The amount of this expense may be increased and at the same time the percentage decreased. This procedure, however, does not necessarily produce any more profit. It is better

for the ordinary firm to adhere to one method in its contracting business. A percentage basis will be found profitable only when its just share of the overhead expense is included.

VOLUME DOES NOT DECREASE AMOUNT OF OVERHEAD

How deceptive it may be not to distinguish between the amount and percentage of overhead expense is well illustrated by a metal roofing

individually, they will be done at a loss unless the overhead expense is applied on productive labor.

If the average overhead expense of the electrical contractor is 23 per cent of the total volume of his business, or 35 per cent on labor and material combined, it is quite evident that the percentage of overhead, if placed on productive labor alone, must be much higher. In the analysis of the business in the July issue

ness. Unfortunately the busy time does not necessarily come to all at the same time. Generally some one is dull, all of the time. There may be times when the practice is justifiable, but the danger lies in the forming of a "low-bidding" habit. It is not easy to go from such "low" to fair-price estimating in a single leap. It is always easier to find excuses for estimating low than high. Therefore, it will be much safer to create the habit of not taking work unless the overhead expense is covered and a small profit in addition.



For every dollar this contractor pays for labor he spends 86 cents for overhead expense—rent, salaries, light, telephone, etc. From this it is quite evident that to the business the cost of a 60-cent-per-hour man is practically \$1.12 per hour, and that any profit from this man's work must be in addition to this cost.

firm in one of the largest cities in New England. This firm did a large amount of all kinds of roofing. It was decided to take on other branches of sheet metal work, such as cornices, skylights, etc.

A short time after this expansion took place a member of the firm said to the writer: "We regard our sheet metal work as a by-product. Our roofing part of the business bears all the overhead expense. Cornices, skylights and work of this nature goes in the estimate at cost." This firm was increasing the volume of its business but did not realize that its overhead expense was being increased accordingly. It was estimating on the theory that its overhead expense would remain stationary, be borne by the former part of its trade—roofing—and that by combining the other sheet metal work on the building at cost with that of the roofing, it could land the contract. Doubtless there are many electrical contractors who have reasoned along the same lines and estimated according to this reasoning.

It is not possible to materially increase the business without increasing the overhead expense.

PROFIT ON LABOR

There are cases almost without number where the electrical mechanic in doing a job uses very little or no material. If such jobs are considered

of ELECTRICAL MERCHANDISING, shown in this series, the relation of expense to productive labor was 49 per cent.

And in the example on page 57 of the August issue, for \$40 paid out for labor, \$34.50 went to cover "overhead." In other words, for every dollar paid to a mechanic, 86 cents was paid out for overhead expense. Using this as a basis to determine the cost per hour, for the mechanic, where no material is used, we would have, assuming the mechanic is paid 60 cents per hour:

Wages of mechanic.....	\$0.60
Expense, 86 per cent.....	.52
Cost	\$1.12

From this it is quite evident that the cost of the mechanic to the business is practically \$1.12 per hour, and any profit from his work must be in addition to this.

SMALL PROFITS IN DULL SEASONS

Is it good business policy in slack times or dull seasons for the electrical contractor to take work on small margins in order to keep the business moving and help pay the running expenses?

This is by no means an uncommon practice, but there is an element of danger in its too frequent use. The extent to which this can be done depends upon a knowledge of how much low profit work can be taken without disturbing the harmony of the busi-

FIGURING PROFIT

The amount of profit that should be added to each estimate is important, but it is a feature that must be largely left to the individual preference and judgment. Some advocate adding a fixed percentage of profit on all estimates. This rule is probably broken more times than it is followed. The writer has talked with contractors in all lines of building work in every section of the country on the subject of how much profit should be added when the first cost—material, labor, overhead expense—is determined. Nearly all admit they observe no fixed rate of percentage. When first cost is reached in compiling the estimate they feel that this is "safety point."

The amount of profit that can or may be added may be influenced by several factors, and these are so various in the different transactions as to render the adherence to any fixed percentage unwise. There are many conditions surrounding each prospective contract that determine the amount of profit. The size of the contract, accessibility for handling, competitors, prospect for closing, probable amount it will carry, are some of the factors that enter into the profit problem of most estimates.

Estimating is the most important—the vital—feature of the electrical contractor's business. It is not a mere matter of reading the specifications, taking quantities from plans, and assembling figures. Into the composition of the estimate and the proposal to perform the contract goes the policy of the business, and from these come the results of that policy and management.

Shakespeare said: "The play's the thing." In the present day he might very timely say for the electrical contractor: "The estimate is the thing."

Basing Vacuum-Cleaner Sales on a Selected Prospect List

How a Richmond (Va.) Dealer is Lightening the Labor of the Home Through the Medium of Telephone Calls, Personal Letters and House-to-House Visits

THE basis of new business is a well-selected list of possible customers. In conducting his vacuum-cleaner business in Richmond, Va., Manager F. P. Thornton of the Electric Specialties Company believes in getting his names of prospects from satisfied customers wherever possible.

The first step in the use of the names is to enter them in a prospect card file, following which a letter promising a demonstration is mailed to each of the possible buyers. Inclosed with this letter Mr. Thornton sends one folder and two testimonial letters furnished by the electric sweeper manufacturer.

AN HOUR OF TELEPHONE CALLS

"Each morning," says Mr. Thornton, "I use the telephone from about 9 to 10 a. m., calling the persons to whom I have sent the letters. I tell them that I am the one who wrote

them regarding the cleaner, and that I will be in their neighborhood for the next few days, and would like to demonstrate a machine for them and give them a chance to try it. If I succeed in getting an appointment I make an engagement for a specific hour and try to be there exactly on time.

"I make a thorough demonstration, going into details of the construction of the machine, but first I always clean a carpet or rug and empty the bag. This never fails to arouse interest on account of the amount of dirt that is collected. Having secured their attention, I go into the details and comparison of the different types of cleaners. If the prospect is at all interested, I try to get her to keep the cleaner a few days and try it.

THE TRIAL PERIOD

"If she will try the cleaner, I usually leave it with her about three days.

Then I call her up, or go to the house, and endeavor to close the sale. If I fail, I find out why she refused to buy and if she promises to buy at a future date I make a note on the prospect card to this effect and follow it up later.

"It helps, I find, to carry some cotton batting, sand, and soda, and to vigorously apply these to the carpet, afterward using the cleaner to remove them, at the same time describing to the prospect how these represent the three kinds of dirt in his home. Then I point out the effects of each upon the carpet, and the inadequacy of other methods of removing them.

"I am a strong believer in concentrating on one article at a time and pushing it. We have a small car with a case on the rear, in which we carry the vacuum cleaners or any articles we may have to demonstrate. This case is easily removed and a washing machine can be carried when we have that type of demonstration to make. This automobile outfit is invaluable, as I could not do business over the scattered territory without it."

"Find Out Who They Are, and Why They Don't"

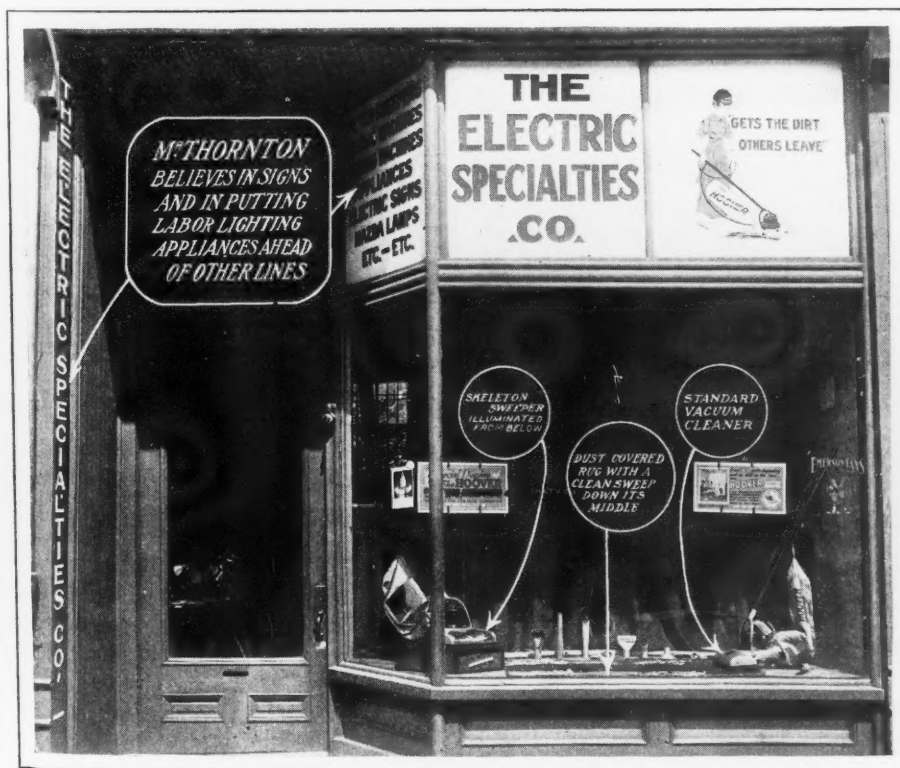
BY A MAN IN MINNEAPOLIS

There's a fellow up in Minneapolis who we will call Ole Olson because that isn't his name; but anyway he is a live wire of an uncommon variety.

He sells housewiring to the womenfolk of Minneapolis and on at least two occasions has broken records it was thought impossible to break. There are five other housewiring men also.

I talked to this man about his good showing and this is what he said: "Bill, let me tell you that if the other fellows upstairs only looked at this thing the way I do why, my goodness, man! they could all make twice the money they do. I know, because I know how they work.

"All a fellow needs to do in this business is to find out who the people are who ought to use electric light but don't. Then ask himself why they don't and the reasons he finds will give him darn good talking points, simply because the greatest basic reason is that they don't know they don't know."



One of the simple and practical show-window displays used by Mr. Thornton in his "Lighten Labor in the Home" campaign. Note how he features labor-saving appliances, in his signs.

Simply and directly the window display shows (1) how the sweeper operates and (2) what it will do. And what more than this does any prospective customer want to know?

Why It Pays to Buy a Good S

THE customer had balked! She said she could not see the value in the shade at which she was looking; she could buy one of the same size and color at the department store for less money! To the sales clerk she had put the question, "Why should I pay more for this shade?"

To tell the honest truth, that sales clerk was stumped. But he was lucky, for the salesman of the manufacturer who had sold the shade to the electric shop and who had been



Base copied from an original in Altman collection, Metropolitan Museum of Art, New York City. Special shade built to match.

watching the attempt at a sale, stepped in to answer the query.

"Madam," said he, "I should like to tell you why you should pay more; I should like to tell you how those shades are made in our factory.

MAKING AND WRAPPING THE FRAME

"The frames come to us already made up. There is a difference, however, between different types of frames. In the type used in this shade the wires, which are of sturdy No. 12 iron, are bent by the hands of expert workmen on wooden molds. The circular or body parts of the frame are built first. Then they are used as the basis upon which to build the stays or ribs. The joints in good shades are made by bending these

Arguments That the Manager of a Retail Electric Store May Pass on to His Sales People and That They in Turn May Use in Selling to the Prospective Purchaser of Silk Shades for Portable Lamps

stays around the circular members at the bottom and top. In addition to this the joints are soldered. Joints between intermediate frame members are made by wrapping the joint with fine wire and soldering it.

"Before placing the silk upon this frame, it is carefully and patiently wiped to remove acid from the metal. Failure to exercise care in this detail means ruin to the silk sooner or later.

"Each wire of the frame is then tightly wrapped with silk of high quality and of identical color with that which will form the lining of the shade. This winding is accomplished by taking a 1¼-in. strip of silk, winding it by hand over the wires so that about ½-in. lap will show. Each joint—which is itself fully covered—the girl who winds the silk sews through and through the winding with needle and thread. Thus between each shade

joint the winding is a unit in its construction.

"To wind an ordinary 26-in. shade requires a full yard of silk, which costs between 42 and 75 cents a yard. With the cheaply made shades, in which the frames are wrapped with cotton, the entire operation of winding may be accomplished at a cost of 20 cents, including the material. In the very high-grade shades the girl who ordinarily does the winding is not even permitted to wind the shade. This is done by the more highly paid



A new style underlay "cut-out" floral pattern in which cretonne is the material used, with chiffon overlay.



A choice example of gold and black lacquer standard, showing Chippendale influence. Pagoda shade.

shademaker herself, to insure absolute rigidity of construction. The reason this winding operation constitutes such an important detail is that the remainder of the covering will be sewed to it. If it is loose it will slip, the silk lining or the shade covering will wrinkle, and the entire job will be unsatisfactory.

SKILLED LABOR REQUIRED

"The next operation consists of sewing the lining of the shade to this frame winding. Skill and care must be exercised in even this process, which will later be covered on account of the fact that the entire lining is visible from the underside. Inexpensive labor cannot be used in this process if a high-grade product is desired. If it could be, a slight differ-

Silk Shade

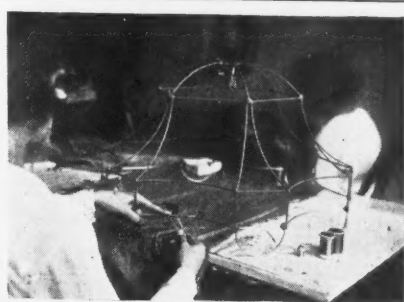
ence in the skill and care exercised might cause as much difference as a dollar in cost to the manufacturer. Experience in shade manufacture teaches, however, that both the labor and the expense of selecting correct material for linings is worth all it costs the user of the shade.

"After the lining has been sewed in place, the completion of the shade is an art, not a manufacturing process. It is, therefore, as varied and various as art must be, and is consequently as difficult to adequately describe. It will suffice, however, to trace to completion the work on this particular creation.

MAKING THE INSERTS

"This shade has cretonne inserts. These inserts must first be cut by hand from patterned cretonne with all the deftness that years of experience and infinite patience can muster. Cutting must be done so skillfully that on the finished shade the pattern will be absolutely perfect in its outline. These are then pasted on the silk lining. Over these inserts an expensive Japanese silk is placed. This fabric is visible only in one-half the panels. The others are covered with plaited silk in some harmonious color effect. In this plaiting it is necessary to use five times the amount of goods displayed upon the visible surface. In alternate panels sunbursts are tastefully employed. These, too, will take from three to five times the amount of silk displayed upon their visible surface. It is a fact that a shade which will not measure in its surface dimensions a complete square yard, may have from 5 to 7 yards of silk used in its manufacture. This does not even take into account the yards and yards of wasted silk in the shape of clippings which are of no value and cannot be used even in winding frames. As junk this wasted silk is worth to the manufacturer about \$1 per thousands yards.

"You may ask why all this time and patience is used; why skill and care is exercised to sew each individual panel securely in its place as a unit, and whether or not the ultimate consumer really benefits by the time expended in the process. To answer



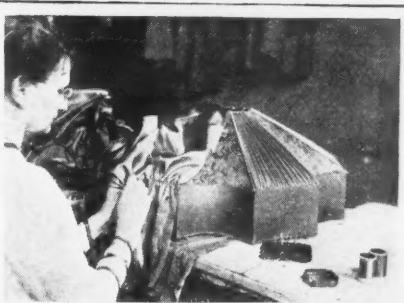
First—Seventy-five cents worth of silk is wound on this wire frame to provide something substantial to sew the lining on.

Second—The lining in process of being pinned to the frame before sewing to the shade begins.

Third—Pleating and sunbursts in course of construction. Note the pile of waste silk.

Fourth—Sewing on the silk which forms pleated panels of top of shade.

Fifth—Braiding and decorations being attached as the last step in completing shade.



that question to the purchaser's satisfaction is easy.

PLANNING FOR EFFECT

"One of the things the shade maker seeks to produce is a definite decorative effect. To do this he must think and plan and buy his raw materials 'ahead of the market,' so to speak. That he accomplishes this is evident when the shade is seen over a lamp, for then the effects which have been created by placing the different patterns, one over another, are at once revealed by the soft glow of the filtered coloration.

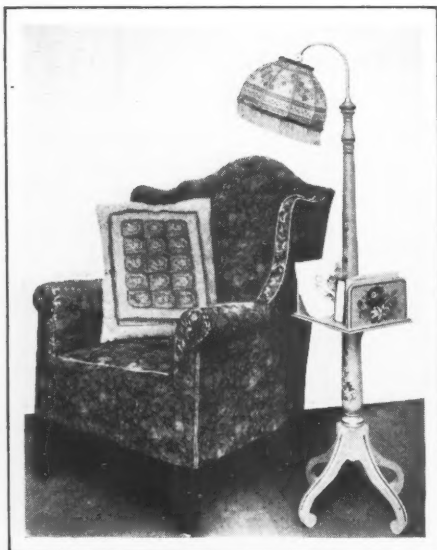
"Besides artistic effects, the shade maker strives for sturdy construction. It is possible to observe whether or not he has attained this by noting the smoothness with which the cretonne lies upon the tight and well-sewed lining. As a purely mechanical proposition, the expenditure of the effort for strength is well worth while.

"Suppose that one panel of the shade is damaged—a hole is burned in it. With the cheap shades the hole cannot be repaired. With one which is well made the damaged panel can be removed and a new panel sewed in its place. An attempt to perform that operation on a shade which is not well made will result disastrously and will cost as much as a new shade. The problem is similar to trying to remodel an old house which was not well built at first. This factor alone makes it economical for the customer to purchase the better shade in preference to one which is cheaply made.

BRAIDINGS, TASSELS AND CORDS

"After the various layers of silk with patterns and plaitings artistically adjusted and combined are in place, comes the problem of selecting braidings, decorations, tassels and cords. For the person who can appreciate overhead cost, this problem is indeed a real one, for the shade manufacturer must have on hand, especially in these times of war, stocks of material purchased three years ago when the Parisian market was not upset. A sufficient stock of these goods, purchased even at wholesale prices before recent increases were made, would cost in the neighborhood of \$5,000.

"From this stock the designer must select these braids which come from Chicago, those images of canary birds constructed of plush with the design sewn in untarnishable silver wire



A rare combination of artistic design, comfort and usefulness in a fine floor-type reading lamp.

made nowhere except in Paris, and the beaded tassels from the millinery markets of the East. The selection of these trimmings must be seen in the mind's eye of the designer at the time he plans his shade.

PARTS THAT COST MONEY

"To make the cost side of the question more comprehensible, it may be said that the tassels on some of the better shades even at wholesale, are priced at from 50 cents to \$1 each. Braid which is of a grade usable on these shades has advanced in the Chicago markets from 25 to 35 cents a yard, and from 12 to 14 yards of braid are required on a 26-in. shade. Every seam is covered on the outside and a light braid is used on the inside of the shade to give finish at points where the frame members might otherwise obtrude themselves upon the vision of a careful customer. It is, in fact, the ambition of the better shade manufacturers and designers to make a product that the customer can

show with pride to even the most minutely observing visitor."

* * *

Long before the customer had capitulated the dealer's clerk was aghast. He had not realized what a host of really interesting things there are to tell about a silk shade. He determined to learn and to tell others. This is his story. These are his pictures. Both are given to those who unfortunately cannot visit the factories themselves, and see for themselves the interesting processes of making fine silk shades.

Why Not Pack Fixtures in Cartons and Save Scratches and Dents?

BY G. LESTER BETRON

The manufacturers of lighting fixtures spend many thousands of dollars yearly for the completion of new designs. These designs are then reproduced on working drawings, and after a series of patterns, molds and spinings are made, they are ready to be finished and assembled.

The fixtures are then wrapped in soft tissue paper, with a heavy paper outer wrapping, and tied into bundles. These bundles are usually packed in wooden boxes and forwarded to their respective purchasers. Upon unpacking them at their destination, one or more are often found to be scratched, dented or broken, and the dealer is forced to either return these to the factory for repairs or else sell them at a sacrifice in order to dispose of them.

The writer wishes to suggest packing such fixtures in stiff pasteboard cartons. The cost of the cartons is small and when the dealer chooses to order several pieces of one design for stock, such cartons could be arranged

on shelving to present a very good appearance. At the same time the cartons would protect the fixtures, which when unpacked would be found in good condition.

The small cost of these cartons could be included in the fixture manufacturer's price, and there is no doubt that the dealers would not object to paying a few cents more to assure safe delivery and provide a safer method of carrying stock patterns.

Getting the Credit Man Acquainted with the Trade

BY FREDERIC P. VOSE

General Counsel, National Electrical Credit Association

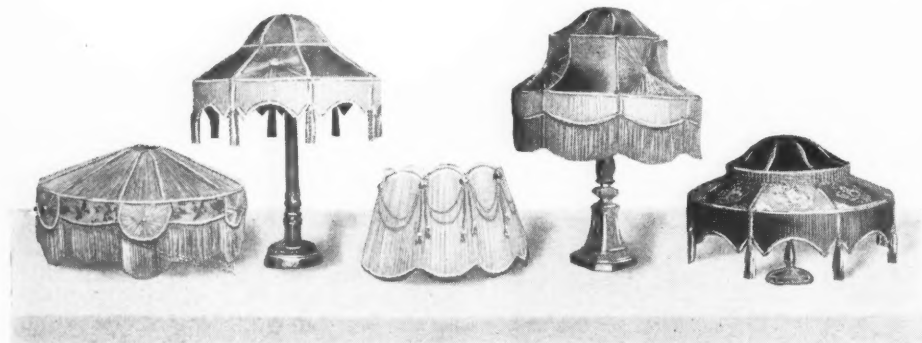
Each year, or whenever possible, the credit manager should get out and cover his territory. It's no more possible for a credit man to develop if he is prisoned at his desk 360 days a year than it is for a plant to thrive shut away from the sun, and without rain.

In his trip afield he will and should experience the difficulties and irritations of reaching a jumping-off place on a cold night to find the only hotel full and his customer out of town. Then he will learn sympathy for the salesman and appreciate his trials and difficulties which he has to overcome.

Another thing he will learn firsthand is the kind of a man his customer actually is—his moods, means, methods, habits, chances, his stock and store, the locality and character of his trade—and a lot more which no mercantile or other agency can report fully.

A credit man should be as much of a booster for his house as is the salesman. But how can he be if he holds converse only with the facts, figures, agency reports, rating books, ledgers and other inanimate things. Give him a chance to meet men, to mingle with the moving world. Don't force him to judge of the manner of man his customer may, or may not be, by the style of his letterhead or what some poor devil of an agency reporter may have said, or failed to say, a year or more ago.

A credit man is not paid to keep losses nil. If he boasts that they are nil, then his house has a preferred line of customers, or he is driving away business, or he's subject to hyperbolic hysteria.



Products of the shade-maker's art. These finished silk shades of the better class illustrate the artistic results possible, and in themselves prove, to the discriminating purchaser, "why it pays to buy a good silk shade." Pictures through courtesy of Max Marquis, Chicago

Know Your Costs and Know When to Say "No"

What to Look Out for When Dealing with the General Contractor in Handling the Larger Wiring Jobs—"Riders" Often Encountered Which May Take the Profit Out of Any Motor-Installation Contract—With Estimate Sheets for Getting at the Cost of a Power Job

By J. W. HOOLEY

ONE of the very first things that an electrical contractor should learn is when to say "No!" Indeed, some contractors never learn to say it, although most of the successful contractors learn it very early in the game.

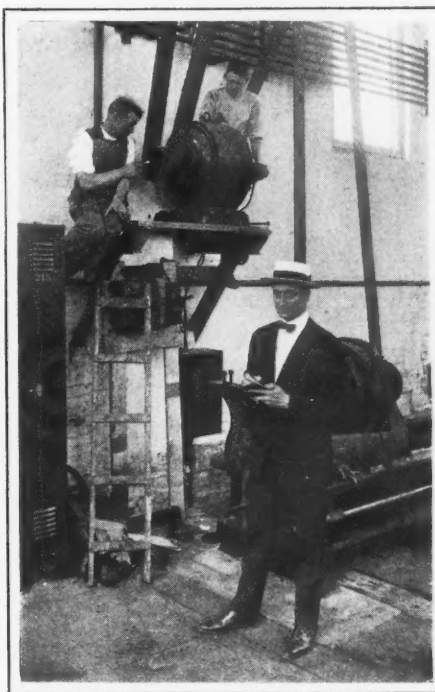
For some years past, unfortunately, a large percentage of the more important new work, such as apartment houses, hotels, office buildings, etc., has generally been handled by some general contractor, with all the sub-contracts lumped in his bid, so that the successful general contractor not only had his own work to prepare, but he also had to sublet about 30 per cent to 70 per cent of his contract to sub-contractors—the electrical contractor among the number.

Each general contractor submitting a bid on a given job would ask about ten sub-contractors of each trade to submit him their bids in turn, picking out the lowest of these on which to base his own bid, which he would then send in. Usually he would put in his bid at cost, or even below, because he knew that when awarded the job he could, by playing one "sub" against the other, get each and every bid discounted 10 to 20 per cent, and this would be his profit.

Hence when a "sub" went to see the general contractor after he had heard he had the job, it was always the same old story.

"Sorry, old man, but you are high." Thereupon, the "sub" would get interested and ask how much high his bid was, and who had him "beat." Of course in this he was playing directly into the general contractor's hands, and before the latter got through with him the "sub" generally owed himself money.

Here it seemed that the old saying that if a man could only receive enough bids he would "surely find a sucker" held true, and all "subs" responsible or irresponsible were welcomed, because the only thing the gen-



Here's the author "out on the job." John W. Hooley, who has contributed many excellent articles on estimating to *ELECTRICAL MERCHANDISING* is a Boston Tech man, but his college education didn't prevent him from cheerfully tackling every job on the payroll, from helper and journeyman to foreman and superintendent, before he became chief engineer and estimator for the Watson-Flagg Company, a big New York electrical contracting concern. Since the first of the year, Mr. Hooley has been signing pay checks for his own organization.

eral contractor was after was the price.

The wiser class of sub-contractors, however, have given the general contractor a wide berth and have gone after work let direct by the owner or engineer.

Some general contractors and owners are really without scruples, and the methods they resort to in order to get the "subs" to cut prices and to play one "sub" against the other are little short of criminal.

The writer remembers of one case in particular where bids were submitted for a hotel job.

Originally the floor construction was designed for concrete slabs, requiring no cutting or elbows, as the

outlet boxes, and conduits were to run in the slab. Also, this construction called for fixture support only of a stud.

For some reason, however, the floor construction was later changed to a terra cotta arch which required all conduit run on top of the terra cotta—also elbows for each conduit to connect with ceiling box, and in addition a fixture support, and the cutting of the arches for the reception of the boxes.

This job involved 1200 ceiling outlets, and with the extra material and labor required the cost was about \$1 additional for each of the 1200 ceiling outlets, making a total added cost of \$1,200.

Neither the general contractor knew nor the architect said a word about this change to the electrical contractor, in fact the contract was drawn and signed by him, and it was only when the contractor's engineer went to initial the plans that the change was noticed.

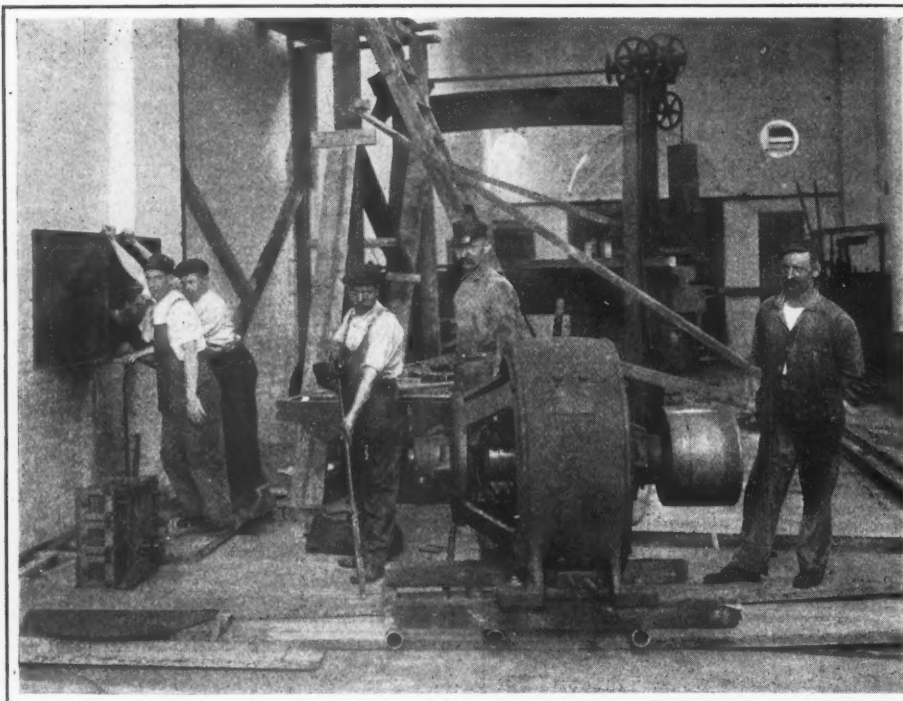
A general argument followed and the contractor refused to go ahead with the job unless the extra was allowed him.

Fortunately for him his estimator had stamped every set of plans and specifications that was figured, so he demanded that the marked plans be produced and finally the extra was allowed.

This contractor had learned to say "No," and he said it emphatically, and because he was a business man and refused to take on or prepare to install a job that in the beginning showed a loss, he gained his point, turned an unprofitable job into a profitable one, and incidentally gained the respect of both the general contractor and the architect.

Another case in which the contractor concerned proved that he could say "No" happened only the other day.

This electrical contractor submitted a bid on a factory wiring and power installation. A short time afterward



The possibility of delays in getting motors and material delivered to the job must not be overlooked by the electrical contractor in figuring up his "progress schedule" or his estimate of costs in these trying days of freight congestion and railroad embargoes.

The 45-hp. motor in the picture, for example, did not actually reach the job for days after it was expected and needed by both contractor and customer. Finally when it did "show up," a special crew had to be rushed to the job at a heavy extra labor cost.

he was notified by the owner that he had been awarded the job and was asked to call the following day and sign the contract.

The price submitted was \$9,600 and the contract was drawn for the amount of the bid.

The owner explained that he was in

a hurry to keep another appointment and asked the contractor to sign the contract. The contractor, however, wanted to read the document carefully before signing it.

It was well that he did for the owner had added a few things in the contract which did not appear in the specifications.

The first of these "riders" was to the effect that the contractor should provide and maintain all temporary light and power wiring; the second was fire insurance covering the electrical work, this to be covered by a policy paid for and secured by the contractor but payable to the owner, and the third stipulated that the owner should pay 40 per cent of the contract price by ninety-day notes, the final payment to be made sixty days after completion and acceptance by the owner. Another little sleeper he had added required that the contractor would have to furnish bond.

The contractor very promptly handed back the contract, and informed the owner that as far as he was concerned the owner could change the contract back in accordance with the specifications, or he would be free, as far as the contractor was concerned, to negotiate with someone else to do

ESTIMATE				
Scale 1/8"				
June 17-17				
220 & R.C.				
Name <i>A. Merrett Factory</i>				
Sheet No. <i>1</i>				
Est. No. <i>742</i>				
ITEM	QUAN- TITY	DESCRIPTION	MATERIAL	LABOR
<i>Weight</i>				
1600 lb	1	40 H.P. Motor 1700 R.P.M.	589.00	
1035 "	1	15 H.P. " 1100 " "	377.00	
825 "	1	15 H.P. " 1700 " "	357.00	
1030 "	1	10 H.P. 600	442.00	
790 "	1	10 H.P. 850	369.00	
690 "	1	10 H.P. 1150	312.00	
5970				
	3	ten haul Belting & Erect		90.00
	1	Main Motor Board	125.00	25.00
	1	6 ckt Power Dist Board	175.00	35.00
	6	Motor switches and		
		submits for motor	135.00	60.00
		starters allow for hold-		
		ing bolts - Tombers set -	80.00	25.00
			2925.00	235.00

Sheet No. 1 (above) lists the motors, switches and switchboards, together with the cost of hauling and installing motor equipment.

Sheet No. 2 (at the right) shows the cost of material and labor for the cables, wiring and conduit, to which there are added the motor-equipment costs from Sheet No. 1, and allowances for the contractor's "overhead" and profit.

From his previous year's business this contractor had determined his "overhead" to be 18 per cent of his total volume of business, or 25 per cent of his costs for labor and material. To meet this 18 per cent "overhead" expense he therefore adds 25 per cent to labor and material.

On a fair-sized job like this, involving few details, he feels satisfied with a 9 per cent profit. To get this, note that he adds 10 per cent to his total costs (labor and material plus "overhead") thus securing a profit of \$541, which is about 9 per cent of \$5,956.

ESTIMATE				
Scale 1/8"				
Name <i>A. Merrett Factory</i>				
Sheet No. <i>2</i>				
Est. No. <i>742</i>				
ITEM	QUAN- TITY	DESCRIPTION	MATERIAL	LABOR
	600	ft. 2" Conduit 25/120	152.00	120.00
	300	ft. 1 1/4 " 13/115	39.00	45.00
	30	2" Elbows 95	285.00	
	5	2" Condulets 250/150	125.00	25.00
	10	2" L & B 50	2.00	
	50	2" Pipe Hangers 25/20	125.00	100.00
	15	1 1/4" Elbows 50	75.00	
	10	1 1/4" Condulets 150/150	150.00	20.00
	10	1 1/4" L & B 35	35.00	
	30	1 1/4" Pipe Hangers 20/15	60.00	45.00
	150	ft. 600,000 C.M.C. 200	36.00	15.00
	600	ft. 3/10 R.C. 50/105	192.00	30.00
	400	ft. #4 R.C. 10/104	140.00	160.00
		Cable solder etc.	25.00	
		Underwriters Certificate	25.00	
		Sheet #1	921.50	257.00
			2923.00	235.00
			3846.50	485.00
			486.00	
			4332.50	
		Overhead 25%	1153	
			5485	
		Profit 10%	548	
		Total	5956.00	

his work as the present contractor was not interested.

The latter also added that he was a contractor and not a financier, and that payments would have to be cash—not notes—85 per cent monthly, final payment thirty days after completion of work and acceptance of same, the delivery of the Underwriters and city department inspection certificates to be accepted as completion of work.

The owner was taken aback somewhat, but he got over it and later on, when a new contract was presented to the contractor it was to the latter's satisfaction, and he signed it.

CULTIVATE YOUR COMPETITOR AND STUDY YOUR COSTS

If electrical contractors want to be successful business men, they must stiffen up and realize that they are just as important and as much to be considered as the representatives of any other building trade, and not try to cut everything down to the last penny.

"Get together occasionally and talk things together" is good advice. The other fellow probably knows some things you may not, and, for the good of all concerned, there is nothing like an exchange of ideas.

Join a contractors' association. If there is none in your section, form one. Cultivate your competitor—you need him as well as he needs you. You are all in the same boat.

Join the association, know your costs, stop cutting prices, and when asked to take business without profit learn to say "No!"

Selling Farm-Lighting Outfits in South Dakota

G. A. McLAUGHLIN of the Aberdeen (S. D.) Engineering Company, has in five years of pioneer effort sold and installed 157 farm-lighting plants within a radius of 75 miles of Aberdeen. Farmers in that territory hold large tracts and each farm consists of from one-half to six sections of land. So conditions are somewhat different from those encountered in the more thickly-settled Middle Western States, where the average farm covers less than one-quarter section. In explaining the practices followed, Mr. McLaughlin said:

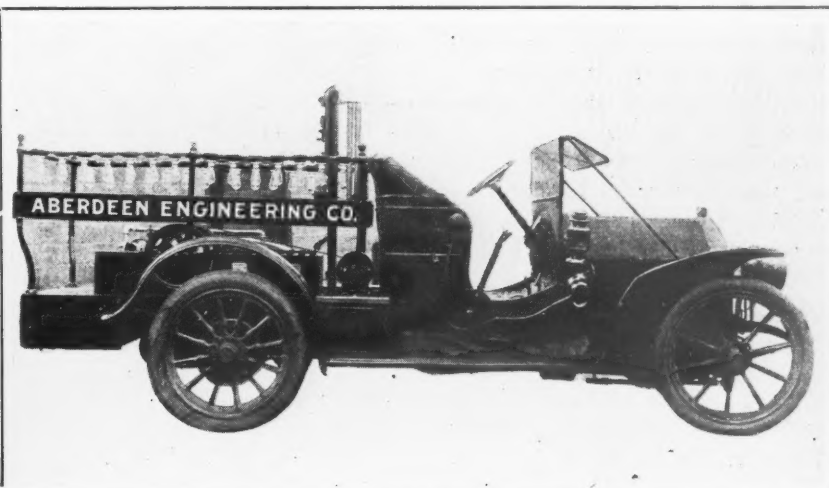
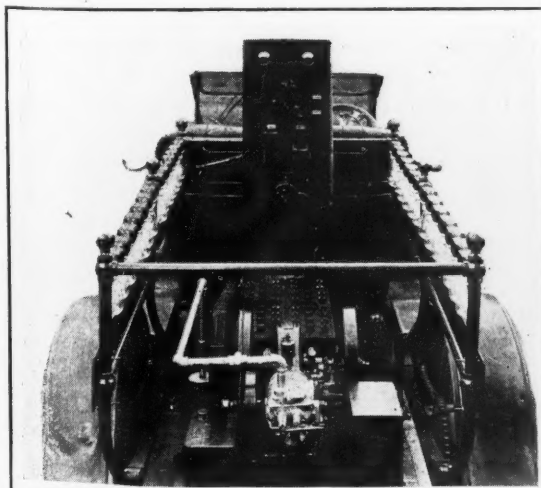
"We are still using the old demonstrator method to a certain extent, although it is not necessary for us to cover the territory as often as formerly. But we have found the demonstrator very useful in a great many ways. It gives our salesmen the opportunity of calling on old customers as well as soliciting new ones. It assists in keeping our plants in perfect running order, and we find that this alone more than pays for the upkeep. The service rendered at such calls is very much appreciated by the farmers. Then again, at such visits we pick up considerable business in other lines, such as elevator equipments, feed mills, gas engines, electric appliances, etc."

"You ask me, 'Will a man who is an electrical contractor to-day, and who is selling farm lighting sets and

appliances, find it to his advantage to consider the possibilities of taking on such lines as elevator equipment, feed mills, gas engines and the like, in addition to his regular line?' " repeated Mr. McLaughlin. "I would say 'Yes,' providing he understands the elevator line. He must familiarize himself with this line just as thoroughly as in the electrical line. In fact, he will never make a success of selling farm machinery to the farmer unless he knows it from A to Z. For if he makes a mistake in his figures he has lost a customer.

"The first thing to do is to gain the farmer's confidence and the second is to hold it. The farmer of to-day is too well versed in all lines to be hoodwinked. I think that any man in the electrical business will do well to cater to the farm trade. A satisfied farmer is a great booster.

"As to building up a large business in electrical appliances, I do not think a contractor can work up a great volume of this business from the farmers, although the appliance trade that he can get all works in very nicely. The first thing to sell a farmer is a washing machine, the second a vacuum cleaner, then a flat-iron and in hot weather a fan. Then there is also profit in lamp sales, though this may not amount to a great deal. However, our lamp sales to our farm customers amount to about \$500 a year."



Where the territory to be covered measures 150 miles across and where single farms cover from one-half to six sections of land, it is found economical to carry the demonstrator on a fairly heavy car, even at the expense of more gasoline and more tire expense. The Aberdeen Engineering Company uses a four-cylinder Haynes car with the body removed. Over the chassis a platform was built and on this

a farm-lighting system was installed. A rail of 1/2-in. conduit was built around the platform with condulets spaced 6 in. apart. These were connected to the switchboard and a set of cords and plugs was made up. This outfit earned its salary from the day it started out, and it is given credit for more sales than any other salesman of the Aberdeen Engineering Company.

PURCHASING AS A PROFESSION

How the Average Electrical Buyer's Attitude Toward the Salesmen Who Call Upon Him, Saddles Every Appliance and Piece of Electrical Material with an Unnecessary Selling Expense. And How an Intelligent and Sympathetic Routine of Purchasing Would Reduce This Cost

THE electrical industry carries a heavy and unnecessary overhead due to poor purchasing methods. Every foot of wire, every piece of apparatus, every appliance carries a burden of sales expense which could be reduced 25 per cent—perhaps even cut in half—by the adoption of something like an intelligent system in buying.

The basis of the fault seems to be that we look upon the salesmen who visit us as a species of confidence man. We do not recognize that the salesman is offering a trade, or, to express it backward and in the vernacular, we have the feeling that the salesman is trying to "put something over." The prospective buyer takes a defensive attitude, fights the salesman off, turns barter into battle and adds to the expense of doing business—not only his business, but your business and mine.

THE BIG GENERAL BUYERS FACILITATE THE WORK OF THE SALESMAN

Other industries have learned the futility of this wasteful method. The department stores in particular have developed the routine of buying to a point where purchasing is a profession, almost an art. And the result, as any salesman who calls upon both trades will tell you, is that it takes less time to interview six department store buyers than it does to see one electrical jobber. To understand why this is true we have only to follow the salesman on his route.

A salesman may walk into a department store which he has never seen before, carrying a "line" of toy transformers of which the store has never heard. "Where would I find the toy buyer?" he asks of the nearest clerk.

"Fifth floor. Take the elevator," is the reply, the floor manager directing the salesman as courteously as he would direct a "charge" customer.

On the fifth floor the salesman finds a large assembly room, technically known as the sample room. At one end is a bulletin listing the various goods handled and the buyers' names. Beneath this bulletin an in-

formation clerk is stationed, assisted by several telephone operators. A form is handed the salesman, which he fills out:

Mr.	
Company	
	To see
Mr.	
Dept.	
Remarks	
Answer	Time

This slip is time-stamped, a telephone message sent to the buyer, and in five minutes the answer is back. That answer is definite and dependable. The buyer may say he will see the salesman in ten minutes, which means that he will be there in exactly nine minutes and sixty seconds. Or he may say that he buys the particular class of goods on May 1,

his ability to hold an interview promptly, the salesman is assigned to a small office where he spreads out his samples. The buyer comes, looks, listens, decides. He does not try to mislead the salesman. He states his requirements exactly and truthfully. He is a buyer, and buying is his business. He buys goods in something of the same spirit as a skillful mechanic operates a machine—deftly, intelligently and with the idea of getting the job finished promptly and in a workmanlike manner.

THE DEPARTMENT STORE SCHEDULES ITS BUYING FAR IN ADVANCE OF ACTUAL NEEDS

Such method is possible because the department store knows its requirements and schedules its buying well in advance of actual needs. Take the toy transformers above mentioned as a characteristic example. Toys are purchased between February and June. When the salesman calls the buyer knows his stock and has prognosticated his next year's needs. Toys, for instance, are being bought now at the rate of 50 per cent increase over last year. In Pittsburgh the increase is 100 per cent. Since these transformers are toys, the toy buyer looks up his sales and stock records and knows that he must buy, nine months ahead of the selling season and all at one time, twice as many as he had last year.

This small item of electrical merchandise, by the way, serves to show not only the difference in buying methods between the electrical dealer and the department store, but it shows how the electrical industry is allowing certain very profitable business to pass in the hands of non-electrical merchants. A man who knows the trade thoroughly says that less than 25 per cent of the toy transformer business passes through electrical jobbers. Part of it goes through toy jobbers; part is sold direct; the balance is mail-order business. This is not because the elec-

Mr.	Watson
Representing	City Elec. Mfg. Co.
Wishes to see	Toy Buyer
Remarks	
Time	Buyer Notified 10:13
	Answered OK 5:48
Answered by	OK 5:48
	575

The department stores have developed the routine of buying to a point where purchasing is a profession—almost an art.

The time of both salesman and buyer is conserved by a prompt, intelligent and courteous reception when the salesman calls.

A form is handed the salesman for him to fill out. This is then time-stamped, and the buyer is notified by phone.

which means that the salesman will have his innings the day following April 30.

Supposing that the buyer indicates

trical jobber lacks price protection, but because he does not realize that the department store, the drug store, the sporting goods store are all edging into the electrical field and are seizing the items which carry good profit and require no technical knowledge in selling.

PROFITABLE SALES THE ELECTRICAL TRADE IS NOW LOSING

Already the sale of such items by the department stores is tremendous. In round figures, Wanamaker buys 1500 toy transformers each year, Marshall Field & Company, 3000, The Fair in Chicago, 1000. But aside from these big buyers there are thousands upon thousands of small stores in the business. Every city of 100,000 population has ten to twenty non-electrical stores handling from six to fifty of these small appliances annually. One day a salesman tried to explain this situation to some jobbers in Pittsburgh.

"We buy in October," they said.

"But that's too late," said the salesman.

"Bunk!" was the reply. "You can't persuade us to stock up with stuff that won't sell for nine months."

So the salesman went out and secured the order of a department store which, if the jobber had taken it, would have netted him \$153 profit.

It is this unwillingness to plan ahead, to forecast requirements and to appreciate how and when the non-electrical merchant does business that is letting these alien dealers acquire so much of the trade that rightfully belongs to us. Electrical dealers buy in November the toy transformers which they expect to sell in the Christmas season. They do not figure their requirements ahead, and in consequence they are caught flat-footed by non-electrical merchants.

THE ELECTRICAL MAN'S ATTITUDE TOWARD BUYING IS FUNDAMENTALLY AT FAULT

The whole trouble gets back to the electrical dealer's attitude toward all buying. Buying, with him, is an evil necessity—something to be put off, forgotten, side-stepped. Salesmen, to him, are a more or less dangerous nuisance—folk to be "stalled," tricked, dodged. We keep salesmen waiting unnecessarily for hours or even days. A department store buyer would be discharged for that. We

"play favorites" and refuse to see new salesmen with new lines. A department store buyer would be discharged for that. We are not honest in stating our requirements or in telling when and to what extent we are in the market. A department store

buyer would be discharged for that. In short, we follow wasteful, extravagant buying practices which successful merchandisers outside the electrical industry have discarded.

And we wonder why the non-electrical dealer is stealing our business.

Help Make Bundle-Carrying a Patriotic Fashion in Your State

At the request of the Editorial Conference of leading business papers, including ELECTRICAL MERCHANDISING, Governor Charles S. Whitman of the State of New York has issued an official proclamation to the people of New York, asking that, in view of the need of men for productive labor in war, and the number of men now occupied in non-essential delivery work by retail stores, every shopper be urged to render patriotic service in the five ways listed in the panel below.

Governor Whitman's proclamation is the first step in a country-wide movement to urge all retail purchasers of merchandise of one kind or another to patriotically do their bit by carrying parcels home whenever possible, by accepting without complaint less prompt deliveries than they are accustomed to, by not demanding special deliveries, and, above all, by avoiding, if possible, having goods sent home and then returning them for

credit. Few persons realize the waste of effort and equipment daily employed in this absolutely unnecessary delivery work.

Merchant readers of ELECTRICAL MERCHANDISING can also help in this necessary national duty by taking this question up with their local chambers of commerce.

A good way to make the start is to get to the Governor of your State, through a committee from your local chamber of commerce, and impress upon the State executives the necessity for an official proclamation on this subject.

The federal government at Washington, through the National Economy Board, is deeply interested in this matter. Now is the time for the patriotic public of the country to banish—once and for all—an economic waste that seriously handicaps America's prosecution of the war to a successful conclusion.



Make Bundle-Carrying a Patriotic Fashion

How the Customer Can Help Reduce the Merchant's Needless Delivery Work Which Puts an Unnecessary Drain Upon the Country's Man-Power

Carry parcels home whenever possible

Accept without complaint less prompt deliveries in war-time

Do not demand special deliveries

Avoid having goods sent home unless you are sure you are going to keep them

Bring back to the store such goods as are portable, when return cannot be avoided

The stores will give the public the best service in their power, but both the stores and the public must do their duty to the country

Electrical Merchandising

The Monthly Magazine of the Electrical Trade

Volume 18—September, 1917—Number 3

PUBLISHED BY MCGRAW-HILL PUBLISHING COMPANY, INC., NEW YORK

The Kind of New Business that Sticks

THE best way for the electrical dealer—or any dealer—to get more business is for him to go after it and build more business—build new business.

Custom new-created in this way—by personal initiative, by sound selling methods, by judicious advertising, by merchandising that renders the customer real service—is the kind of new business that sticks and that renders the greatest profit to the dealer.

Unlike trade taken from other dealers or sales pried away from other merchants by price cutting, new-created custom tends invariably to remain in the possession of its discoverer. He serves it with a minimum of competition, for such business is his very own and provokes no other merchant to lie awake nights plotting retribution to win those customers back. And even if by chance the other fellow should attempt such buccaneering he will find that *business Dealer Jones creates is business mighty hard to take away from him.*

The real merchant in any line—and this point electrical merchants, in particular, need to remember—is not content merely to let drive at the customers of his competitors. He seeks instead to create new markets and to sell to the new markets he creates.



Line Up the Whole Family in Your Labor-Lightening Campaign

"IF the men did the washing they would soon buy electric washing machines." How often we have seen this statement on some dealer's window card or in his local newspaper ad. The time has come to give that argument a broader application and to effectively drive it home.

If men were giving the attention that they well might to their family business of housekeeping, we know that there would be machinery installed to do much of the work. It would be bought even if only because of the fact that men have found out in factories that human labor costs more than machines. They would invest in such electrical equipment as is necessary to make this household plant of theirs efficient.

It is, therefore, up to us to show that, after all, the men *are* responsible for this condition and ought to recognize the fact.

Did you ever try devoting one evening a week to talking home equipment, not just to the housekeeper, but to the whole family? It can be done. Make an appointment after dinner, then go round and tell the story, cite the figures and show the photographs while hubby smokes and wifey knits socks for some poor soldier. It has proved profitable for other men. It will for you.



Selling Mrs. Housewife Leisure

A MEMBER of the sales force of a Pennsylvania electric store tried repeatedly to sell an electric vacuum sweeper to a woman in his territory who could well afford it. The price had frightened her and she feared a big increase in her light bills if the cleaner were used. The prospect's address was then turned over to another salesman. He put his highest-priced cleaner in the back of his runabout and departed, returning to the store an hour later without the machine.

"It wasn't hard," he explained in answer to the question from his fellow workers. "I told her that machine could give her at least an hour more a day to herself—that it made possible another afternoon a week for Red Cross work. I asked her to buy—not a mere vacuum sweeper, but a cleaner home, easier housekeeping and more time off for \$5 a week, and she took me up on this proposition."

Effective constructive selling like this means offering, not simply percolators and toasters to the purchaser but better and quicker breakfasts; not only an electric washing machine but liberation from gruelling labor, and an additional half-day for rest and recreation, and not a vacuum cleaner at so many dollars, but cleaner carpets, clothes brushing service and more leisure for the housewife.

Offer Him Accident Protection

THE accident hazard of bare and improperly screened lamps has been recognized by the accident insurance companies and by compensation commissions in most States, and the insurance premiums paid by the factory owner may carry a penalty for such inadequate lighting.

Gasoline, loose oily waste and excelsior are fire risks, as is well known, and as such call for high fire insurance premium. Bare lamps and improper lighting installations are likewise hazards, from the accident risk standpoint, and are similarly called upon for higher insurance premiums. The prospective customer usually knows about the fire risk penalty, but may not know about his higher accident insurance rate. Sell him, then, a lower accident insurance rate through the removal—by better lighting—of the cause of his insurance penalties.

IDEAS FOR THE MAN WHO SELLS



*Plans, Schemes and Methods to
Increase Sale of Electrical Goods*



How to Can Electrically by "Cold-Pack" Method

BY GRACE T. HADLEY

"It be-Hoovers us, these strenuous days, to 'Preserve or Perish,' to 'Can or Collapse,'" said a prominent suffrage leader, with a merry twinkle in her eyes, "hence our novel window display on a busy street in this city.

"You will note how up to date we are in our methods of doing what used to be the hot and tiresome work of canning by the open-kettle method, as our mothers used to do.

"Prominent suffrage leaders send in the products of their gardens—peaches, pears, plums, corn, tomatoes, carrots, beets, beans, spinach. The material is prepared, blanched and cold-dipped, then the cold vegetables are packed at once in hot glass jars, hot water added, and one teaspoonful of salt. In the case of fruits, a thin hot syrup is poured over them, the lid of the jar is fastened loosely, and the products are then sterilized at 212

deg. Fahr. in an electric fireless cooker or in an insulated electric oven, from fifteen minutes to three hours, the time varying according to product.

"Note how clean and cool the two workers appear, although the day is warm, for there is no heat from the electric cooker or from the insulated oven where the products are sterilized, and the workers are kept cool by an electric fan on top of the oven."

How a Lorain (Ohio) Bank Finances Housewiring Deals

In connection with the house-wiring campaign conducted by the Lorain (Ohio) Electric Company, New-Business Manager Quillin has worked out a plan for having a local bank carry the investment on wiring costs that operates very satisfactorily.

After receiving from the property owner a cash payment of 20 per cent of the bill, the lighting company takes his note for the balance.

The bank then advances cash on these notes as security, so that the campaign investment is carried, leaving only interest costs to be paid.

Educating the Tenant to Demand Electric Service

Realizing that the demand for electric service on the part of prospective tenants has an excellent influence upon house owners, the Virginia Railway & Power Company of Richmond, Va.,

This form was a part of a page ad used by the Richmond central station to urge the tenant to insist on electric service.

has been running page ads in local papers, headed with the slogan "Don't sign the lease unless the house is wired." The suggestion is made that the agent be asked to give a written agreement to wire the property within thirty days after the lease is signed, and a form for indorsing such a statement on the lease is shown.

Drying Fruits with an Electric Fan

Here's another use for the electric fan. In connection with long wooden trays, it can be used to dry sliced fruits and vegetables in quick time, and thus do its share in the nationwide movement for food economy.

According to Bulletin No. 841, issued by the U. S. Department of Agriculture, sliced string beans and shredded sweet potatoes can be dried in a few hours in this way. By keeping the fruits and vegetables cool during the drying process, it is pointed out, the color is retained and spoilage is cut down.

Supplementing the Government bulletin, the Society for Electrical Development, 29 West Thirty-ninth Street, New York City, has issued a booklet showing how to incorporate the idea in campaigns, window displays and advertisements.



Canning fruit by the "cold-pack" method at the Woman Suffrage demonstration rooms, New York City. An electric range oven and an electric fireless cooker are used to sterilize the products after they have been packed in jars. The New York Edison Company donated the services of two demonstrators to show this method of cold-pack canning, which is also being promoted by the Society for Electrical Development's expert in household economics, Miss Hadley.

Corralling House-Wiring Customers with Postcards

The Parsons (Kan.) Railway & Light Company has a list of 1000 people who ought to have their houses wired. The company has prepared a set of six mailing cards which remind the recipients of house-wiring in a manner that can be called neither commonplace nor tiresome. Two sets of the mailbox missionaries have been



One of a set of mailbox missionaries mailed to house-wiring prospects at Parsons, Kan.

dispatched by the publicity department, and in each case jumps in wiring business have resulted. During "Wire-Your-Home Time" added pressure has been put on the advertising by the use of handbills, newspaper copy and posters on the company's cars.

How Telephone Calls Helped Sell Sewing Machine Motors

BY H. W. DERRY

The telephone is a source of advertising and sales which has not been taken full advantage of by the merchants of the present day. This wonderful entrance into people's homes is often very useful.

During the latter part of July, from July 15 to July 30, which always has been a very quiet time for selling merchandise, the Pittsfield (Mass.) Electric Company ran a telephone campaign on sewing machine motors.

Through the publicity obtained in this telephone campaign we were instrumental in placing twenty-eight machines, besides accomplishing much in interesting others in electric appliances.

Two-column advertisements were placed on alternate days in each of our daily papers, at an expense of \$33.60.

The wholesale jobbing house arranged for a telephone saleslady to call our subscribers. Her calls aver-

aged fifty a day. The total number of calls was 450 (cost \$27.80), the total number of demonstrations forty-six, and the total number of sales twenty-eight.

Featuring a Satisfaction Creed

The firm of Stanley & Patterson, New York City, believes in customer satisfaction. The following statement is used on some of the company's advertising material:

"We appreciate the business of every customer—large or small; we intend to give *absolute satisfaction to every customer*. If for any reason you ever feel dissatisfied with anything we do or don't do, please tell us about it, and if possible come in some time and get acquainted with us personally, for business is always transacted so much more satisfactorily where such acquaintance exists."

Illinois Electric Company's Efficient System for Handling Large and Small Orders

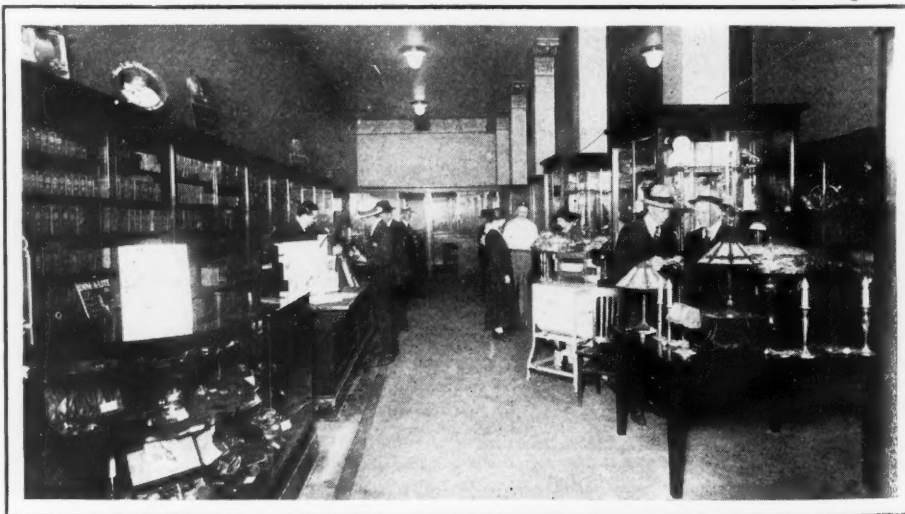
In its new headquarters at Chicago, the Illinois Electric Company has a part of its administrative sales and clerical offices in the rear of the retail store, while the remainder are on the second floor front. The ground floor rear is used for packing and shipping. The basement contains the heavy stock and the upper floors carry the standard package goods. Broken packages are carried in bins on the first floor and on a mezzanine

floor not far from the packing and shipping department.

In connection with the latter class of goods, which are largely used in filling small orders, particular attention has been paid to developing an efficient handling system. The various items that make an order are selected from the bins and placed in a sheet-metal basket of about 3 cu. ft. capacity. When all items are in the basket it is placed on a set of shelves. These shelves are open at both sides to permit the entry of the basket from the stockroom and its delivery to the packing table on the other side of the shelves. The original shipping ticket stays with this basket throughout its travels. About 150 such baskets are in constant circulation throughout the different departments, and the experience has been that they soon save in time enough to justify their cost and at the same time greatly facilitate the handling of small orders.

Not only in the handling of small orders, however, has attention been given to proper layout. Throughout the entire building the arrangements of elevators, loading and unloading platforms, chutes and vamps have been worked out so that goods will flow easily to the place for which they are intended.

One detail which is an innovation is the placing of electric outlets for portable vacuum cleaners at frequent intervals among the shelves and bins. In the interest of cleanliness and as demonstrating faith in electrical goods this departure is of more than passing interest.



In the new retail store of the Illinois Electric Company the general appearance has been enhanced and valuable display space is gained by building glass cases around the central columns.

If 10 per Cent Is a Fair Profit for the Contractor

Then 50 per cent is the proper amount to add to your labor and material costs to cover 23 per cent overhead and earn for you 10 per cent profit on the job. Figure it out yourself.

How a Jobber Boosts the Electric Cooking Idea

The young women employed by the Pacific States Electric Company, San Francisco, enjoy tasty electrically cooked luncheons at a cost of a few cents daily. In connection with the restroom for its women employees, the company has installed a modern electric range outfit, the use of which, with complete kitchen paraphernalia, is furnished free to the young women of the company. Each day at 11 o'clock one of the girls leaves her work and goes to the electric kitchen to prepare the luncheon for the other twenty-five. "Turn-about" is taken, and in this way, for a week at a time, each girl gets first-hand experience with the "cook-by-wire" method. As the girls mingle with their friends or leave the company to enter homes of their own, they take with them, of course, the electric cooking idea. And thus, as the company figures it, the double purpose is achieved of providing tasty, inexpensive, satisfying luncheons for its employees, and building a future market for its wares.

Putting Wired Houses "On the Map"

Small pictures of houses fastened to a map of the city have been attracting the attention of residents of Greenfield, Mass., to the office of the electric light and power company.

Every time a wiring contract was signed a picture of a house was pasted on the map at the location of the job.



One of Greenfield's "Dirtless Wiremen" and the window map. Pasting pictures over wired locations on this map helped to make house-wiring successful.

Only wiring jobs in already-built houses were counted. At the start of the drive more than 75 per cent of the houses in town were already using central station service, but in spite of that fact, the company's energetic

When Does 23 Plus 10 Equal 50?

Answer: When 23 per cent is your "overhead," and 10 per cent is the profit you want. For then you have to add to your costs for labor and material not "23 and 10," but "32 and 14"—and "32 and 14" figures out in simplest form as plain "50." So, we repeat, to cover 23 per cent overhead and 10 per cent profit, add 50 per cent to your costs for labor and material.

salesmen rounded up a goodly number during the "Wire-Your-Home" Time campaign, a publicity feature of which was "the Dirtless Wireman's" faultless wiring methods.

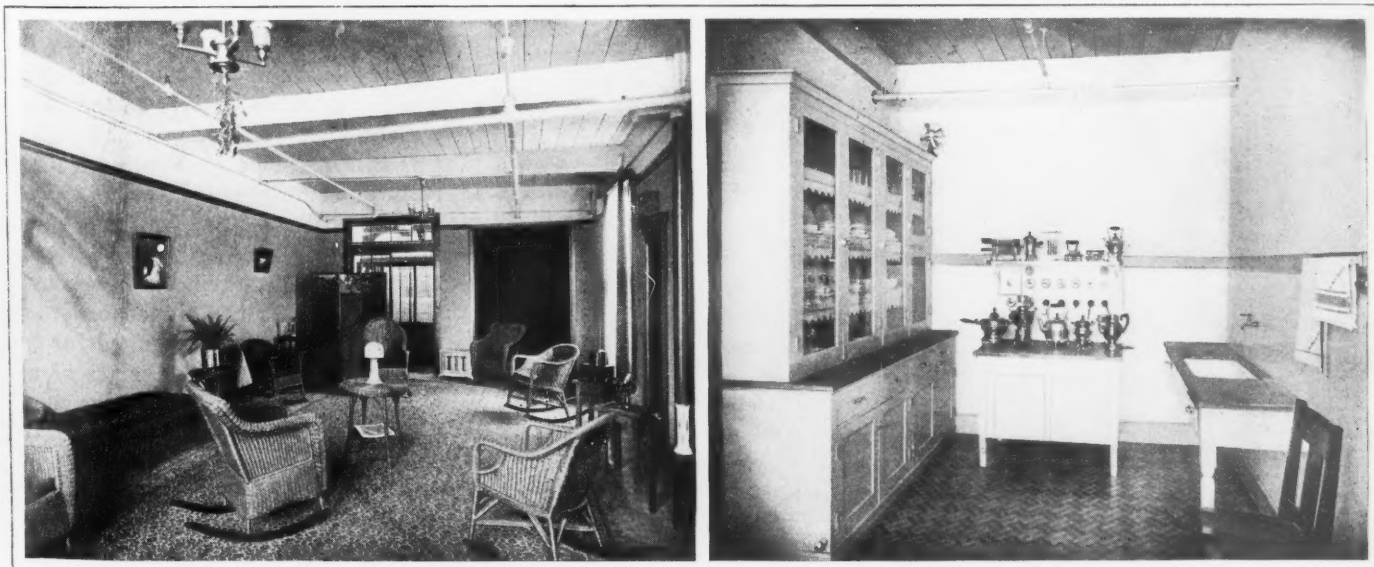
Telegrams Used in House-wiring Campaign in Ohio

In starting a drive to increase the sales of electricity among present non-users the Massillon Electric & Gas Company, operated by Henry L. Doherty & Company, introduced an innovation in its sales campaign by sending out telegrams to all such persons reading:

"We are making a special price on house-wiring to non-users of electricity in Massillon beginning Feb. 5. At the present price of electricity in Massillon you cannot afford to be without this wonderful service in your home. May we send our representative to give you this offer in detail?"

"Phone Bell 5, Ohio 112.

"MASSILLON ELECTRIC & GAS CO."



Here's an electrical jobbing house that helps its women employees have dainty electric luncheons for a few cents each, while meantime building its own future market in electric ranges. Adjoining its restroom, as you see, an electric kitchen has been installed. Here one girl cooks lunch for the other twenty-five, leaving her regular work at 11 a. m. to get things ready. Two other girls remain after lunch to clean things up. Each girl has one week in charge of the cooking job every six months, and, of course, each is an enthusiastic advocate of electric cooking with her own sphere of influence in her "set," her parents' household, and her own future home.

Sales Clinchers Should Be Used Judiciously

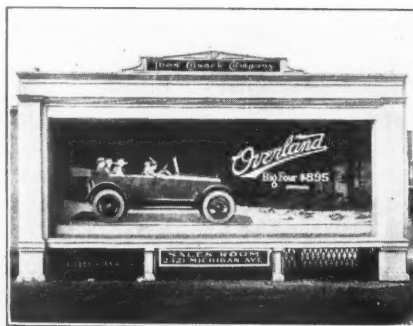
Almost every salesman has one or more sentences or phrases which he calls "sales clinchers," and which are designed to hurry the buyer.

Such clinchers are all right when properly used, but, employed as they frequently are, they may become quite offensive.

Have you ever walked into a store to make a purchase and have the man who waited on you show you two or three specimens of the article you wanted, then, almost before you had time to examine them, ask, "Which one shall I wrap up?"

Naturally, you felt that the salesman didn't care to give you any more of his valuable time. If you buy, the chances are you leave the store with a bad taste in your mouth. You feel that you were literally forced into a hurried selection; you are not sure you got what you wanted; but you are reasonably sure of one thing—that you're not going back to that store.

Before utilizing a sales clincher the salesman should be sure the prospect is well pleased with at least one of the articles shown. He should be led into conversation regarding the article in question, and allowed to do some talking himself. Then, at the proper time, it is a mark of good salesmanship to use the clincher. In this way, a sale comes naturally, and the customer's good-will is retained.



This window display, with its automobile in action, was very effective in attracting the attention of the passers-by.

Electrically Lighted Outdoor Advertising Theater

As an innovation in spectacular advertising which utilizes electric light, a structure built by the Thomas Cusack Company for the Willys-Overland Company is unique. An Overland stock model car of actual size is represented in graceful action as it passes with its pleasure party through heavily wooded rolling country. The realistic effect is obtained through four sets of scenery mounted 3 ft. apart in the body of the structure to give distance and natural position to the trees, lake and hills. This advertising theater stands 18.6 ft. in height, 12 ft. deep and 35 ft. in length. It is made substantially of wood and stands on a concrete foundation. The lighting effects are produced by 100 25-watt tungsten lamps and twenty 100-watt nitrogen-filled lamps, which are

flashed in banks at five-second intervals. By the proper blending of green, amber and clear lamps the lighting is made to carry the pleasure party through the cycle of an entire day.

A Use for Exhausted Dry Cells

A real log-burning fireplace is one of the requirements of the modern living room, and many persons who keep log fires going on their hearths have been attracted by the splendid colors given off by salt-water-soaked driftwood. But since all logs cannot be of driftwood, an ingenious inventor has devised a powder which, sprinkled over the fire, gives the characteristic driftwood flame color.

And now comes a Cornell professor with the discovery that discarded dry cells tossed on a log fire make, after all, the best of "driftwood" flames. The zinc cups and their ammonium-chloride contents give their characteristic flame colors to the fire, and prove more lasting than the ordinary "driftwood powder" which is purchased by the box.

Therefore, make an effort to sell your worn-out dry cells to people with open fireplaces.

Enlisting Help of School Children in Electric-Iron Campaign

In an electric-iron campaign the Potomac Electric Power Company of Washington, D. C., recently disposed of more than 200 irons through the aid of boys and girls in its locality. The company advertised in the newspapers that for every iron sold at the special price it would give one copy of some popular juvenile book, to be chosen by the youthful salesperson. Either cash or C. O. D. orders were accepted. In the case of C. O. D. orders the signed orders to deliver irons were exchanged for the premium books, the deliveries of appliances being made by the company's men. On the cash sales the children made their own deliveries. Besides the direct revenue to the company through its increased load, the sale interested a large number of people in electric service and made many friends for the company among the parents of the book-earners.

A Patriotic Window that Attracts Ear as Well as Eye



The Minneapolis (Minn.) General Electric Company has been featuring in its show window an automatic working figure of Uncle Sam which operated electrically from an ordinary lighting socket. The right hand of the figure keeps up a continuous tapping on the window, while the left hand rises from the side and points to the proclamation. The head of the figure at the same time turns slightly in the direction of the pointed hand. It is the intention of the sales department, according to T. H. Kettle, to use the figure mechanism quite extensively in the near future, merely substituting some other head and costume for that of Uncle Sam, as the need for various timely displays arises.

HINTS FOR THE CONTRACTOR



Ideas on Estimating, Stock Keeping, Shop and Construction Methods, and Collections

Cool Fall Days Are Near— Sell Electric Radiators to Homes

In the spring and fall months central stations, dealers and contractors receive many calls for electric heaters. Selling initiative on the part of the dealer will also help sell many more. Not every prospect has, of course, conditions which will permit what might be called economical operation of an electric heater. Care should be taken when selling an electric radiator that the application is one which can be considered satisfactory, so that the sale will not prove a boomerang.

Rooms that are already heated with steam, hot water or stoves and in which a few more degrees of heat would be acceptable, are the ideal places for the installation of electric heaters. Small rooms such as ticket offices having dimensions not exceeding 6 ft. by 8 ft. by 10 ft., can also be heated satisfactorily at ordinary rates for electricity. When figuring the amount of auxiliary electric heat necessary for a small room, the heater should be of such size as to give 2 watts per cubic foot of space in the room. In small rooms such as ticket

offices, cashier offices, etc., without other sources of heat, 3 watts per cubic foot should be used unless the room is badly exposed to the weather, in which case it is proper to install 4 watts per cubic foot. These figures have been found by experiment to work very well for Chicago conditions.

Contractors' Slogans that Catch the Eye

"Wire for me and I will wire for you," is the catch line used on the letterheads and advertising matter of W. A. Hagerman, electrical contractor, Tampa, Fla.

S. May, electrician, corner Sixth Avenue and Thirty-eighth Street, New York City, has the phrase "Wire to May to Wire" rather widely distributed over New York City.

And a Utica, N. Y., contractor places on each new building he wires a sign reading, "The W. E. Gray Electric Company is Wiring This Building Also," thus cleverly emphasizing the fact that he is in the habit of handling more than one job at a time.

Handy Chart for Determining the Length of Rolled-Up Cable

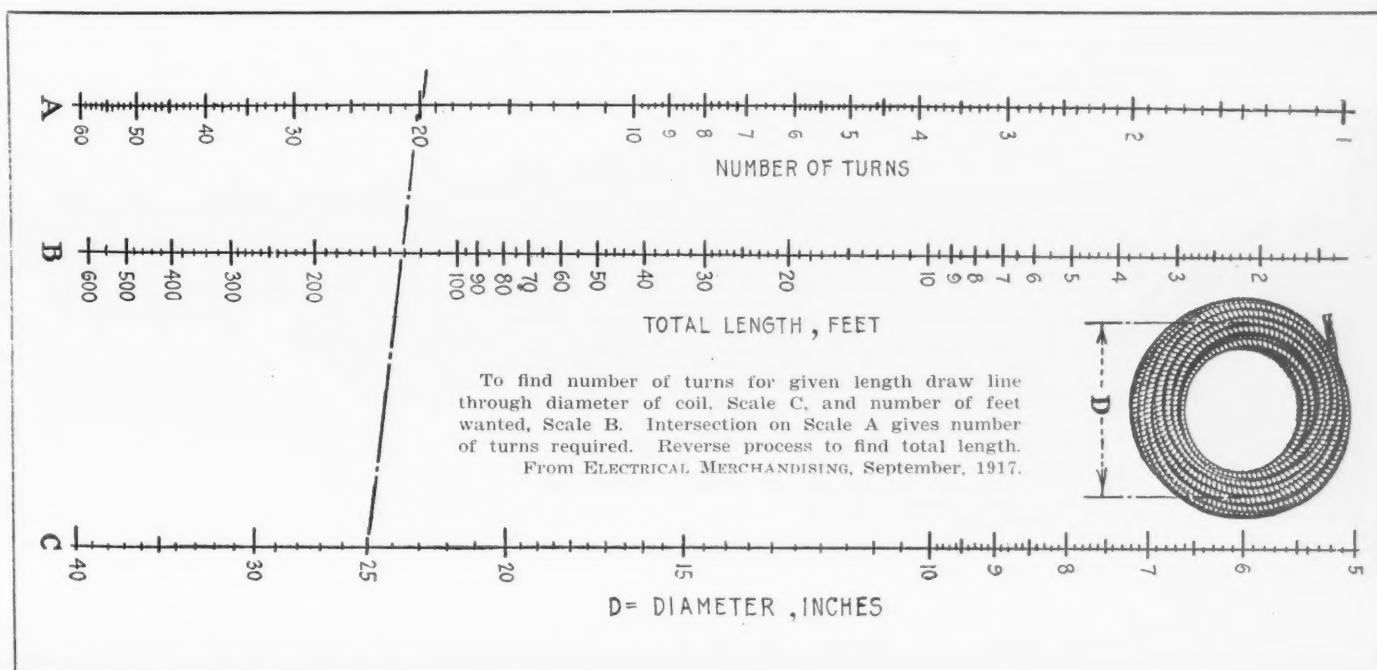
BY N. G. NEAR

The man who handles wire or cable will find the accompanying chart useful for finding the length in feet of any ordinary rolled-up cable, cord, wire, etc. All that is necessary is to count the number of turns and measure the "average" diameter as shown on the chart, and then lay a straight-edge across the chart as indicated by the dotted line drawn in the sketch. The answer is immediately found in column B.

For example: To find how many feet in a rolled-up cable whose average diameter is 25 in., and in which there are 20 turns, connect 20 in the top scale with the 25 on the bottom scale, as the dotted line shows, and the intersection with the middle scale will give the answer—131 ft.

The range of the chart, it will be noted, is large enough to care for most of the conditions to be found in ordinary practice.

The chart can be used "backward" as well. For instance, if it is desired to take along 300 ft. of cable, cord or wire, and the workman wants to know how many turns to take, a straight-edge laid across 300 on the middle scale will tell how large the coil should be made and the number of turns required in order to contain the desired length. Paste this scale on a card and hang it in your stockroom.



Cost of Light in Terms of Labor Cost

Light in dark places is not only a help, but a necessity. Where, indeed, is there a manufacturer who would not supply an additional helper for every man in the shop, if that helper need be paid only one-fiftieth or one-hundredth of the labor cost of the mechanic he is assisting? An allowance of one 100-watt lamp per man, with energy at 5 cents per kilowatt-hour (0.5 cent per lamp-hour) requires an extra production on the part of the workman of but half a minute for each hour that the lamp is needed if the workman receives 60 cents an hour. And at the common-labor rate of 30 cents an hour, it is only necessary to increase production to the extent of one minute for each hour's use of the lamp.

Letting the Electric Sign Customer Help in the Design

Let the customer feel that he has a part in designing his electric sign, is the policy of J. J. Curran, manager of the Curran Sign Company, Spokane, Wash. The first thing in selling, says Mr. Curran, is to sell the idea of an electric sign, and once that is accomplished the prospect is brought around to the shop. In the meantime plans for the sign are worked up. Then these are changed by the sign man but this is done in such a way that the suggestions seem to come from the customer. Not only is the customer better satisfied but later when he tells his neighbors about the sign he designed, it incidentally boosts Mr. Curran's stock.



Coaxing Customer's Attention to Less Popular Goods

By J. E. NEUTRA
J. F. Buchanan Electric Supply Company, Philadelphia, Pa.

WE TAKE the best selling articles and display them as far back in the store as possible. In order to reach these goods the customers must pass the less popular merchandise. On their way they notice the slower selling articles and unexpected sales often result.

Quick Installation of Flood-lighting Job

The officials of the Raymond Concrete Pile Company, superintending a job for Swift & Company at Kansas City, Mo., decided at noon one day that it would be necessary to start a night shift that evening. They called upon the Satterlee Electric Company to provide illumination on the lot which was approximately 200 ft. long by 150 ft. wide. It was impossible to secure floodlighting equipment immediately, so the Satterlee company furnished six 1000-watt Buckeye Mazda lamps with 20-in. Ivanhoe steel reflectors. These were tipped up on an angle of 45 deg. on mountings at one side and one end of the field. As a result of this job, on which the Raymond company made just as good time working under artificial light as in daylight, it has been decided to use electric instead of acetylene lighting on all future night shifts.

Use Illumination Knowledge—Don't Talk It!

BY NORMAN MACBETH

Salesmen have been cautioned over and over again that they must sell *illumination* and *not lamps and fixtures*. These salesmen will find it easier if they will go beyond the conception of selling illumination and will sell what illumination will do—in other words, the results that may be secured from adequate illumination. When you are doing this you are talking in terms likely to be understood by the industrial plant manager. The too-frequent mistake of salesmen with a factory prospect is to air their knowledge of the technique of lighting—to talk glibly of foot-candles, lumens, coefficients of reflection, intrinsic brilliancy per square centimeter, retinal fatigue, that the angle of reflection equals the angle of incidence, the effect of the inverse square law, and similar high-sounding terms. This kind of knowledge is invaluable to a salesman, but he should use it—not talk it.

The average plant manager is not interested in how much you may know, but he is decidedly interested in what you can do for him and will pay you well for the service thus rendered. The average plant manager is interested in his own business, not in yours. He knows as much about lighting as you do about the clothes you wear, the food you eat, the advisability of seeking shelter from the rain, and all the other every-day experiences that are common to human beings. He wants better factory lighting, but has been fooled oftener in this field than in any other. Three



At noon the contractor was summoned and asked to provide light for a night shift to start to work six hours later. The contractor hustled a bit with the result that construction work proceeded that night under the illumination shown.

times the light for the same money has been proved to him within the past ten years, over and over again on paper—but rarely in his plant. He is not a piker and is willing to pay more than you have the nerve to ask, for effective lighting equipment. He is agreeable to and expects to pay more for better lighting, and is inclined to question any statement that tends to make him believe that here he can get something for nothing.

Good lighting is worth all it costs and more, and can just as easily, and much more satisfactorily, be sold on the basis of charging a fair price. A given service for the least cash expenditure is not the ideal of all purchasers. If this were so in transportation we would still have colonist cars in place of Pullmans, and all the automobile manufacturers would to-day be making "near-Fords." A railroad can run a colonist car just as far and just as fast as a Pullman. A Ford will go further with less gasoline, less oil and a lower tire cost than any car costing ten times as much.

Throughout the whole range of our necessities—and lighting is a necessity—there is no other thing or service in which the endeavor to sell is so persistently made on the appeal of "low price" as is the case with lighting.

Arguments That Sell Window Illumination

Norman B. Hickox of the National X-Ray Reflector Company, Chicago, is a strong believer in the value of the plan which undertakes to sell window lighting to the smaller merchants first in order to use that sale as ammunition against the owner of the larger store. The big fellow, Mr. Hickox argues, feels bound to keep ahead of the smaller store, and upon seeing that his own windows are outshone by those of the smaller company, will request an installation of more intense brilliancy. When this occurs it is only necessary to go to the smaller dealer again, resell him a slightly higher amount of light, thus repeating the cycle. Mr. Hickox believes further, in view of the fact that ordinary daylight is of the intensity of 1000 foot-candles, it certainly should not be very difficult to convince the man that 15 foot-candles of electric light is not a very great amount.

Tri-City Contractors Use List Price and Discount

The leading contractors of the Tri-Cities of Rock Island and Moline, Ill., and Davenport, Iowa, have adopted a plan which facilitates changes in prices with the fluctuating market. The plan, which takes into account both the wiring of old and new houses, establishes a list price for knob-and-tube outlets. This price remains stationary, and as the prices of materials change the discount which is used in connection with this list is changed. For instance, on the list prices of Class A work reproduced herewith, the price for one

The Electric Construction and Machinery Co.				
M Old Residence				
In case customer wants changes made or additional work done, have him authorize same on back of this slip, using his name—Under this, keep list of material and time required to make the change.				
Location	Lbs.	Fittings	Brackets	Switches
Front Porch	1	1		1 Flush
Reception Hall	3	1		2 " 3-way
Living Room	4	1		1 2-ckt Elect Sw
Dining Room	4	1		1 2-ckt " "
Kitchen	1	1		1 snap
"	1		1	no
"		Baseboard		no
Pantry	1	1		1 snap
Cellar	3	3		1 "
SECOND FLOOR				
Hall	1	1		1 Flush
Four Bed Rooms	4	4		4 "
" " "	4	Base Outlets		
Attic	1	1		1 snap
	29	15	1	16
15 Pds @ \$4.00 ea				\$60.00
1 Bkt @ 5.00 "				5.00
6 fl sws @ 7.20 "				43.20
2 3-way fl sws @ 8.20				16.40
4 snap switches @ 3.70				14.80
2 2-ckt electrolier sws @ 14.40				28.80
5 Base outlets @ 8.00				40.00
Three circuit mains				21.00
			Total	239.20
			Less 40%	91.68
			Net	137.52

The work on this slip seems to have been done in a satisfactory manner and the building has been left in good condition.

Estimate slip showing method of applying discount on total after summing up items.

ceiling outlet in an old house is \$4. One of the firms is at present applying a discount of 40 per cent to this schedule so that the price per ceiling outlet in an old house would be \$4 less 40 per cent. If the cost of material or labor entering into a ceiling outlet should change, it would only be necessary to change the discount figure. Each firm establishes its own discount figure independently.

In actual practice, however, discounts are not figured on separate items; the entire job is figured up and then the discount is figured upon the total, as illustrated on the slip

LIST PRICES CLASS A WIRING SCHEDULE ROCK ISLAND AND MOLINE Knob and Tube Outlets

	New	Old
1 Ceiling	\$2.20	\$4.00
2 Bracket	2.50	5.00
3 Fl recept com.	6.00	8.00
4" SPSW com.	5.20	7.20
5" 3-way SW com.	6.20	8.20 ea.
6" 4-way SW com.	9.70	11.70
7 D P Fl Sw com.	6.20	8.20
8 S P Sn Sw com.	3.70	5.20
9 D P Sn Sw com.	4.00	5.50
10 3-way Sn Sw com.	4.00	5.50 ea.
11 4-way Sn Sw com.	5.50	7.00
12 Conduit outlet on brick wall, add	6.00	6.00
13 Conduit outlet basement work	6.50	6.50
14 Basement D P Sn Sw com with Sw	7.50	7.50
15 Basement D P Fl Sw com with Sw	9.00	9.00
16 Ea 2 Ckt electrolier Sw—2 S P Sw.		
17 Ea 3 Ckt electrolier Sw—3 S P Sw.		

Mains

In conduit complete with entrance fitting and entrance switches, steel boxes and meter conduit.

	New	Old
18 1 Ckt job	\$15.50	\$15.50
19 2 Ckt	18.00	18.00
20 3 Ckt	21.00	21.00
21 4 Ckt	22.00	22.00

Items 16 & 17 are equivalent to 2 S P and 3 S P Switches.

Regarding the items 18 to 21 inclusive always add the amount in addition to the regular charging price according to the number of circuits.

reproduced herewith as made out by the Electric Construction & Machinery Company, of which J. Marron is president.

In commenting upon this plan of applying a list price and discount, Mr. Marron says: "The main advantages of the list price is that everybody can use a standard list and apply the discount that suits him. Moreover, a firm can change the discount very readily to meet changes in prices of materials."

Banquet Lighted from Openings Beneath Diners' Plates

W. H. Spangenburg of New Orleans makes a specialty of unusual lighting effects, particularly in connection with New Orleans' yearly Mardi Gras.

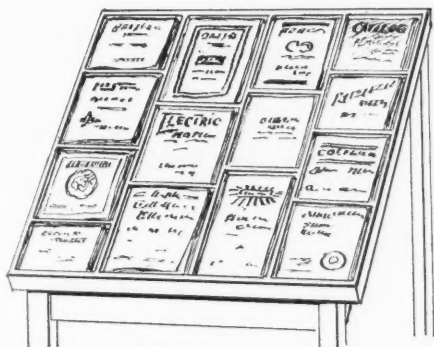
Not long ago Mr. Spangenburg was asked to devise a lighting novelty for a large banquet.

When the diners took their seats, nothing unusual was noted except an attractive central fountain. At a signal, however, the hall was darkened and beneath large glass-covered circular openings at each plate there flashed up beams of light, illuminating the diners in weird fashion. Meanwhile the fountain was taking on hues of various colors, but the bizarre effect of the banquet board glowing from so many stove holes, with the resulting strange shadows on the diners' faces, made a memorable picture.

ers, thus indicating where more selling effort should be put forth to make a better turnover.

Keeping Manufacturers' Folders in Neat Shape

Every electrical shop handling appliances is supplied with a variety of folders and booklets descriptive of their product by the several manufac-



Rectangular divisions on top of a sloping table are used to advantage for displaying manufacturer's literature

turers. In order to make effective use of these leaflets and folders, it is necessary that they be placed where visitors to the store may get them easily. In a number of stores a flat top table is devoted to the display of these circulars, but after a few dozen persons have looked over the library, the table looks as though a waste basket had been overturned upon it.

A Philadelphia electrical dealer gets around this difficulty very nicely by the use of an inclined table, the top of which is neatly divided into rectangular pockets. Enough folders of each class are kept on this table to keep the piles just flush with the dividing molding. In this way the various cover designs get in their good work of exciting the customer's interest.

Boost the "Gift Shop" Idea

The man who runs a retail electric shop will find it well worth while to keep his store before the attention of his public in the guise of a "gift shop" as well as a place merely to buy things electrical. To all the folk who are looking for novel and useful presents for Mother's anniversary, Sister Susan's graduation, or little Willie's birthday, he should make known the fact that his electric shop is ready with a host of suggestions.

The man or woman looking for a suitable gift is already in the mood to buy, and it needs only a hint from the dealer to make the purchase something electrical, whether a flashlight, a portable lamp, or a labor-saving household help. The gift buyer, too, is invariably a generous spender. He asks only that the article he selects be useful, attractive and "interesting." Electrical appliances and devices embody these gift requirements above all other articles. Encourage the public to come in and look over your stock when in search of presents, and put yourself in line to supply this ready-grown demand.

Boost the "gift shop" idea in connection with your store.

The Shadow of the Lamp

A little stunt that will attract a lot of attention in the window and cost practically nothing to arrange, is to place a kerosene lamp or perhaps a candle in such a way that a powerful electric bulb beside it will cast, on a screen properly placed, a shadow of the lamp or candle flame. This illustrates the great lighting power of the electric bulb used and to many people the idea will be entirely novel and create an effect out of all proportion to the actual comparative values shown.

Attracting Customers in the Supply House

By a well-arranged grouping of appliance and fixture displays along one side of the aisle in the office of the Economy Electric Company of Worcester, Mass., an effective means of arousing the customer or visitor's interest is utilized. The center aisle of the establishment is about 7 ft. wide and yet no impression of crowding is the result of the arrangement illustrated. The office of the president and treasurer is immediately at the left of the entrance; behind this are several rooms used for the display of additional fixtures on the ground floor—a point much appreciated by patrons who have expressed their dislike of "second-story work" in the merchandising of lighting apparatus. On the right-hand wall a well-selected display of fixtures is made, avoiding the mistake of attempting to show too many units in a limited space. These are all wired for service, and on the three 2-ft. by 4-ft. tables shown just enough appliances are exhibited to interest the passer-by. All prices are plainly marked on gilt-bordered tags and are printed on the best grade of glazed cardboard. A lamp and miscellaneous supply of counter at the rear is reached only after passing the displays shown.



The tasteful arrangement of a few appliances and fixtures makes this office a place of interest to visitors

"HOW IT WORKS" EXPLAINED IN THE CUSTOMER'S LANGUAGE



The ABC of Electrical Appliances—Ideas and Stories for Your Local Newspaper



From Vase to Electric Portable in Half an Hour

In the Westinghouse Lamp Company's booklet "Lighting the Modern Home" directions are given for transforming an ordinary vase into an or-



Making Your Own Table Lamps

IT IS very easy to make your own table lamps. Any vase about the house can be converted into an attractive lamp. All you need is some wire, a collar to fit the top of the vase to hold the lamp socket, and a shade holder to be covered with silk or cretonne. It is not necessary to put a hole in the bottom of the vase for the wire, for it can be introduced at the top as well as at the bottom of the vase.

Old-fashioned oil lamps can be converted into electric lamps for the small cost of the necessary socket, holder and wire. Often you can pick up oil or candle lamps of Chinese or Japanese design, which are most attractive when lighted with a small Mazda lamp.

Mazda lamps enable you to get the light of three table lamps at the former cost of the light of one.

A hint for making use of old vases and your spare time

namental electric table lamp. If the trick is not easily accomplished at home a visit to the nearest electrical shop will solve the problem.

Serving Electrical News to the Public Prints

Electricity is doing things every day in military, public and private service that are full of human interest. In order to aid the newspapers in getting this good material the Society for Electrical Development is issuing each month a sheet of pictures showing unusual motor installation and other electrical applications. Each picture sheet is accompanied by a brief description and matrices, or

pressed paper forms, ready for type-metal casting, are supplied to the newspapers without charge. The September sheet shows an electric ice machine in army service, a portable generator in use at the Plattsburg training camp, an electric mail sorter working for the post office, and an electric cutter shaping Sea Island cotton for covering airplane frames.

Giving the Electric Cleaner A Bigger Job

"Wish I could get some of the carbon out of the cylinders on that car to-day," complained Mr. Jones at breakfast.

"Well, why don't you take those screw-things off and scrape it with that sharpened poker that hangs out in the garage?" inquired the Lady of the House.

"I tried that the last time, and after I got the little hunks of carbon loose I couldn't get them out of the cylinders."

"Huh!" exclaimed William with ill-suppressed scorn. In spite of the fact that sixteen-year-old young men are not supposed to be authorities on subjects mechanical and electrical, the heir to the Jones estates was a not infrequent source of useful data.

"Well, young man, what's your solution?" inquired his father somewhat skeptically.

"You got an electric vacuum cleaner, ain't you? Why don't you suck the carbon out with that? Just 'cause the guy down at the electric store cleans Smyrna rugs in his ee-leet demonstrations isn't any reason why you shouldn't get your money's worth out of our machine, is it? They never demonstrate how it will clean off the cat after she falls into the flour barrel either, but it will."

"All right, son. We'll exhume the carbon this afternoon."

"While you have the cleaner out there," suggested Mrs. Jones, "I don't see why William couldn't clean the top and side curtains."

"Fine!" agreed Mr. J. "Why didn't we think of that before?"

School Girls' Prize Essay Contest Interests Mothers

"The Advantages of an Electric Iron to Mother" was the title selected by the Citizens Electric Company of Hot Springs, Ark., as a subject for a prize essay contest for school girls during a recent week.

School girls in grades from the third to the sixth were eligible to the contest. First prize, a Hughes junior electric range, went to the writer of the essay reproduced herewith. The essays were made a part of the Eng-

"ADVANTAGES OF AN ELECTRIC IRON TO MOTHER."

Does your mother use an electric iron? Mine does, and she thinks we couldn't keep house without it. Her iron saves her time because the iron heats quickly, it is always smooth and hot, it is never dirty, its handle is never hot, it needs no stand, and she can attach it wherever she has an electric socket.

The old flatiron that grandma used always kept some one on the "go." First, some one had to cut and bring in the wood, then a fire was made and kept going. The fire was so hot that her face and hands were nearly cooked, and when she got through she was tired to death.

Now, this electric iron is a real pleasure to use. Mother can keep her hands pretty and clean and can put up her ironing board anywhere she wants it without any inconvenience. She may even entertain callers while she is ironing if she is in a hurry.

FLORINE HORN,
High Sixth Grade, Ramble School.

This essay won first prize in toy electric range contest at Hot Springs, Ark.

lish study at school, being written on a specified day in the presence of the teachers, and immediately handed to the judges, who were out-of-town men connected with the electrical industry. Through the contest, as results have shown, the advantages of the electric iron were talked over in a large number of homes.

"3000 Uses for Electricity"

The Society for Electrical Development has reprinted its booklet, "More Than 3000 Uses for Electricity," the first edition of which has been exhausted. The text has been completely revised in the reprinting, and heavier paper stock has been used, making it a more effective and useful book.

SALES HELPS FOR THE DEALER



*What the Manufacturer Offers
to Help You Get More Trade*



How the Cost of Raw Materials for Vacuum Cleaners Has Gone Up

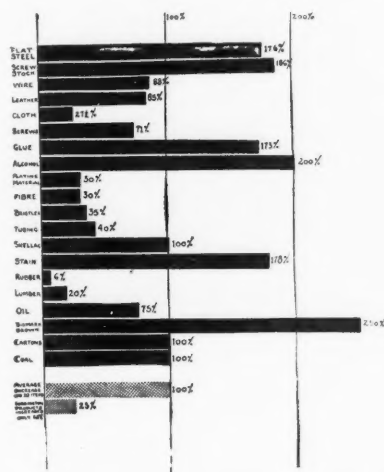


Chart showing increase in costs of materials entering into manufacture of vacuum cleaners over last two years

The prices of electrical appliances, like those of other commodities, have been going up these last two years, and the customer who compares prices now with those prevailing during 1914 is likely to undergo surprise and disappointment.

Such a buyer, who complains of a few per cent rise in price of his favorite appliances should be shown how much the raw materials entering into those appliances have risen in cost in the same period. For example, according to figures collected by the National Sweeper Company, Torrington, Conn., the average increase in cost in the materials entering into a vacuum sweeper has been 100 per cent. The average manufacturers' increase to the trade in the same period, including recent advances, has been only 25 per cent.

How a Lighting Sale Was Made

In a neat little folder which has just been issued by the National X-Ray Reflector Company, Chicago, all of the correspondence which passed between the reflector company, its

salesmen, the prospective purchaser and the electric construction company preceding a window lighting installation is published for the benefit of the trade. The correspondence shows not only the company's broad policy in co-operating with the electrical trade, but also illustrates the extent to which it carries its engineering service into the field.

Advertising the Contractor to His Own Local Public

AS ELECTRICAL MERCHANDISING has many times pointed out, this is the day when the electrical contractor is receiving deserved recognition on all hands and is "coming into his own."

Among the many evidences of recognition which trace this tendency of the times, one of the most interesting and significant is the unique popular-publicity campaign to ad-

vertise the electrical contractor to his own local public begun by a leading manufacturer and distributor of wire products in the *Saturday Evening Post* of Sept. 15.

The big message of these advertisements, two of which are reproduced on this page, is to make the electrical contractor known and recognized in his own community, and to win for quality products and quality workmanship the recognition of local owners, architects and engineers.

To this end the "copy" in the ads has been written along broad lines calculated to benefit electrical contractors and the industry in general—for the advertising man who conceived the idea and prepared the ads themselves evidently appreciates the fact so often demonstrated in big advertising campaigns, that development publicity which strikes out along a new line, while benefitting the industry at large, invariably returns the chief share to the interests promulgating the new idea.

Now it is "up to the electrical contractor" to cash in on the valuable publicity that has been spread before his customers and prospects.

HERE'S A MAN YOU SHOULD KNOW— THE ELECTRICAL CONTRACTOR.

He's the man—and the only one—who should do the electrical work—all of it—big or little—anywhere.

When you're sick—you send for the doctor. When you have to go to law—you hire a lawyer. When you have wiring to do—don't let a jack of all trades or your chauffeur do it—get a good electrical contractor. It's cheaper and more satisfactory in the end.

If you know of none—write to us—and we'll tell you of one in your locality.

New Buildings and Remodeling

On new work—home or factory—you, of course, have an architect and electrical engineer. They know how to plan the whole building—including the electrical work. You would not have a rule-of-thumb builder do the planning.

These specialists will see to it that a reliable contractor does the electrical work. When remodeling or extending wiring—get the advice and service of these men. They know how.

Electrical Appliances

This is the electrical age. You should have electrical convenience in the home—and motor drive in the factory. You should have the maximum service from that most modern and tireless of servants—ELECTRICITY.

All electrical appliances—in the home or factory—require insulated wire behind the push button and socket. It is hidden—but it is there—and very important, too.

For more than 30 years, practically from the beginning of the electrical industry

HABIRSHAW
"Proven by the test of time"
Insulated Wire
has been accepted as a standard of quality all over the world.

Manufactured by THE HABIRSHAW ELECTRIC CABLE CO., Inc.
10 East 43rd Street
New York

Distributed by the Western Electric Company
10 East 43rd Street, New York
Offices in all principal cities.

WHAT ARE YOU GOING TO PUT IN FRONT OF THE SWITCH AND BEHIND IT?

Together with our electricity—this modern and tireless servant—a necessary knowledge of how to use it—must go hand in hand.

You should know about the many labor-saving appliances and conveniences for the factory and home—operated by electricity.

On building operations, you should, of course, call in an architect and an electrical engineer. In wiring old homes—and remodeling those already wired—the contractor or local light and power company can—and will gladly—all you have to do is make electricity work for you.

All of these men—experts in their respective fields—will tell you the importance of good insulated wire behind the switch—to deliver all of the electrical energy at your motor—light sockets—wag machine—washing machine—iron—vacuum cleaner—and heating and cooling appliances.

The man who can tell you all about electricity and how to use it is right in your locality. If you don't know them—write to us—and we shall be glad to introduce them to you.

For more than 30 years, practically from the beginning of the electrical industry

HABIRSHAW
Insulated Wire
has been accepted as a standard of quality all over the world.

Manufactured by THE HABIRSHAW ELECTRIC CABLE CO., Inc.
10 East 43rd Street, New York

Distributed by the Western Electric Company
10 East 43rd Street, New York
Offices in all principal cities.

This full-page ad. in the *Saturday Evening Post* for this week (Sept. 15), advertises the electrical contractor to his own public. Here is a new and important departure in popular publicity, and one that the contractor should not fail to tie right in with

The second advertisement is scheduled for the *Post* of Oct. 13, and tells of the labor lighting appliances sold by the contractor-dealer

Western Electric 1918 Year Book Ready

The Western Electric Company, which three years ago established a new mark among jobbers by announcing that it would issue its supply catalog every year, now scores as a pioneer by publishing its 1918 year book in the early fall of 1917, to meet the demand for a book to be used by buyers in placing requisitions for fall and winter stocks.

The new 1918 year book which is now being distributed to the trade follows the plan of uniform list price and basic discount. In addition, manufacturers' list prices are shown on certain standard lines for the convenience of any who prefer to buy on the manufacturers' discount, or who desire an independent means of checking invoices.

Another feature of this 1160-page book is the index listing the company's extensive line of printing plates, window displays, stuffers, lantern slides and other forms of assistance for dealers handling Western Electric appliances.

"How to Use the Two-Way Plug"

It's a mighty difficult matter to get up an interesting window to display sockets, receptacles, plugs and the like. Occasionally, however, someone accomplishes this feat. The Robertson Cataract Company of Buffalo seems to have attained particular success in one of its windows on Benjamin two-way plugs. The feature of the window was the fact that the arrangement of goods showed definitely "how to use two-way

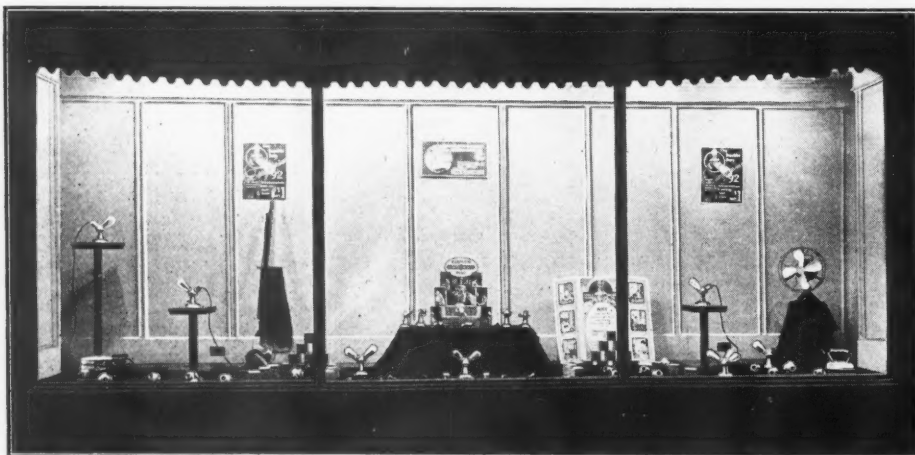
plugs." A view of the display is shown in the accompanying illustration.

Helping the Contractor to Advertise Wiring Conveniences



Here is a ready-made newspaper ad. which will tell its labor-lightening story for any electrical contractor who will add his name and address.

Local advertising on the part of contractor-dealers is a business tonic that the Arrow Electric Company of Hartford, Conn., thoroughly believes in. To help its contractor-customers get the fullest benefits from their advertising expenditures in local newspapers, the Arrow company has prepared a set of six ads showing how double outlets, pull switches, split sockets and lamp locks can be used for economy promotion and labor lightening in the home. One of these sample ads is reproduced here.



Here's a two-way plug display that is good because it shows just how the double outlet may be used and what it will do

Electrotypes of these ads, with spaces for the dealer's name, are supplied free of charge by the company. They can also be obtained without reading matter, so that the user may write his own "copy" if he prefers.

N. E. L. A. Correspondence Courses for Salesmen

Fred R. Jenkins, chairman of the committee on education of salesmen of the Commercial Section of the National Electric Light Association, has issued a notice calling attention to the three N. E. L. A. courses on practical electricity, commercial engineering, and accounting. The course of ten lessons in practical electricity, inaugurated recently, has already more than 500 subscribers. The lessons are written without the use of advanced mathematics, the object being to give a practical knowledge of the fundamental principles of electricity and magnetism and the construction and use of electrical apparatus.

The commercial engineering course comprises seventeen lessons, and is intended to assist the student to keep pace with the rapid development in applications of electricity and thereby to enable him to prepare himself for advancement.

Underwriters Issue New Booklet on Fire Prevention Rules

The National Board of Fire Underwriters has prepared for the Council of National Defense, and is mailing to a list of 66,000 of the leading manufacturers of the United States, a booklet of directions for the prevention of fire, under the title of "Safeguarding Industry," together with a showcard of fire prevention rules for employees.

The purpose of the booklet is that of preventing fires in industrial plants which are working under the abnormal conditions of wartime emergency. President Wilson has given a signed statement for the cover of the booklet.

In case any manufacturer should be overlooked or should fail to receive his copies the Board of Fire Underwriters will be glad to honor his request immediately and without expense, upon application by letter to its headquarters, 76 William Street, New York City.

Record of Lighting Fixture Patents

Design Patents

The following are ALL the design patents pertaining to lighting materials, issued by the U. S. Patent Office between July 27 and August 27, 1917, inclusive:

14,341. Incandescent Lamp Socket. Walter J. Jones, New York, N. Y., assignor to General Electric Company. Filed Sept. 26, 1916. Issued Aug. 7, 1917.

14,343. Extension Socket. Reuben S. Benjamin, Chicago, Ill., assignor to Benjamin Electric Manufacturing Company, Chicago, Ill. Filed Jan. 31, 1912. Issued Aug. 21, 1917.

51,124. Cluster Lamp. R. Milton Retherford, Muncie, Ind. Filed March 22, 1917. Issued Aug. 7, 1917. Term, seven years.

51,130. Light Globe. Ford S. Barbiers, Lancaster, Ohio, assignor to the Hocking Glass Company, Lancaster, Ohio. Filed May 25, 1917. Issued Aug. 14, 1917. Term, seven years.

51,131. Lighting Fixture. Robert Y. Barrows, Rutherford, and George V. Strahan, Newark, N. J., assignors to Mitchell Vance Company, Inc., New York, N. Y. Filed July 7, 1917. Issued Aug. 14, 1917. Term, seven years.

51,150, 51,151, 51,152. Artificial Light Shade. Herman Plaut, New York, N. Y. Filed June 20, 1917. Issued Aug. 14, 1917. Term, seven years.

51,160. Gas and Electric Fixture. Gottfried Westphal, Guttentberg, N. J., assignor to David Shapiro and Meyer Aronson, New York, N. Y. Filed Oct. 9, 1916. Issued Aug. 14, 1917. Term, three and one-half years.

51,161. Lamp Shade for an Incandescent Light. John A. Whaley, New York, N. Y. Filed May 25, 1917. Issued Aug. 14, 1917. Term, three and one-half years.

51,162. Light Shade. Albert C. Wilcox, Bridgeport, Ohio. Filed June 15, 1917. Issued Aug. 14, 1917. Term, three and one-half years.

51,166. Wall Plate for Lighting Fixtures. Robert Y. Barrows, Rutherford, and George V. Strahan, Newark, N. J., assignors to Mitchell Vance Company, Inc., New York, N. Y. Filed July 7, 1917. Issued Aug. 21, 1917. Term, seven years.

51,167. Spindle for Lighting Fixtures. Robert Y. Barrows, Rutherford, and George V. Strahan, Newark, N. J., assignors to Mitchell Vance Company, Inc., New York, N. Y. Filed July 7, 1917. Issued Aug. 21, 1917. Term, seven years.

51,168. Wall Plate for Lighting Fixtures. Robert Y. Barrows, Rutherford, and George V. Strahan, Newark, N. J., assignors to Mitchell Vance Company, Inc., New York, N. Y. Filed July 7, 1917. Issued Aug. 21, 1917. Term, seven years.

51,169, 51,170. Lighting Fixture. Robert Y. Barrows, Rutherford, and George V. Strahan, Newark, N. J., assignors to Mitchell Vance Company, Inc., New York, N. Y. Filed July 7, 1917. Issued Aug. 21, 1917. Term, seven years.

51,171. Arm for Lighting Fixtures. Robert Y. Barrows, Rutherford, and George V. Strahan, Newark, N. J., assignors to Mitchell Vance Company, Inc., New York, N. Y. Filed July 7, 1917. Issued Aug. 21, 1917. Term, seven years.

51,188. Lighting Fixture. Wilmer S. Snow, Chicago, Ill., assignor to National X-Ray Reflector Company, Chicago, Ill. Filed June 20, 1917. Issued Aug. 21, 1917. Term, seven years.

Structural Patents

1,234,951. Globe for Electric Arc Lamps. Theodore Stave, New York, N. Y., assignor to Westinghouse Electric & Manufacturing Company. Filed Dec. 23, 1912. Issued July 31, 1917.

1,234,985. Case for Incandescent Electric Lamp Sockets. John Weber, Schenectady, N. Y., assignor to Weber Electric Company, Schenectady, N. Y. Filed Sept. 3, 1912. Issued July 31, 1917.

1,234,993. Shade Holder. Robert K. Witz, Chicago, Ill., assignor to The Yost Electric Manufacturing Company, Toledo, Ohio. Filed Feb. 9, 1916. Issued July 31, 1917.

1,235,020. Adjustable Shade Holder. Robert E. Ewing, Avalon, Pa., assignor to Pittsburgh (Pa.) Lamp, Brass & Glass Company. Filed Jan. 27, 1913. Issued July 31, 1917.

1,235,484. Light Projecting Apparatus. Rufus E. Jones, Milwaukee, Wis. Filed Dec. 22, 1916. Issued July 31, 1917.

1,235,531. Lamp Socket Casing or the Like. Charles J. Klein, Milwaukee, Wis. Filed Dec. 8, 1913. Issued July 31, 1917.

1,235,632. Upright Shade Holder. Lauritz W. Andersen, Waterbury, Conn. Filed Oct. 28, 1915. Issued Aug. 7, 1917.

1,235,635. Electric Lamp Shade Holder. Morris W. Askin, Philadelphia, Pa. Filed Oct. 25, 1916. Issued Aug. 7, 1917.

1,235,951. Double Shade Holder. Alfred A. Wohlaer, New York, N. Y. Filed Dec. 16, 1915. Issued Aug. 7, 1917.

1,236,133. Electric Switch. Carl Eric Anderson, Bridgeport, Conn., assignor to the Bryant Electric Company, Bridgeport, Conn. Filed Sept. 1, 1916. Issued Aug. 7, 1917.

1,236,373. Reflector Support. Paul M. Hotchkiss, Chicago, Ill. Filed Sept. 15, 1916. Issued Aug. 7, 1917.

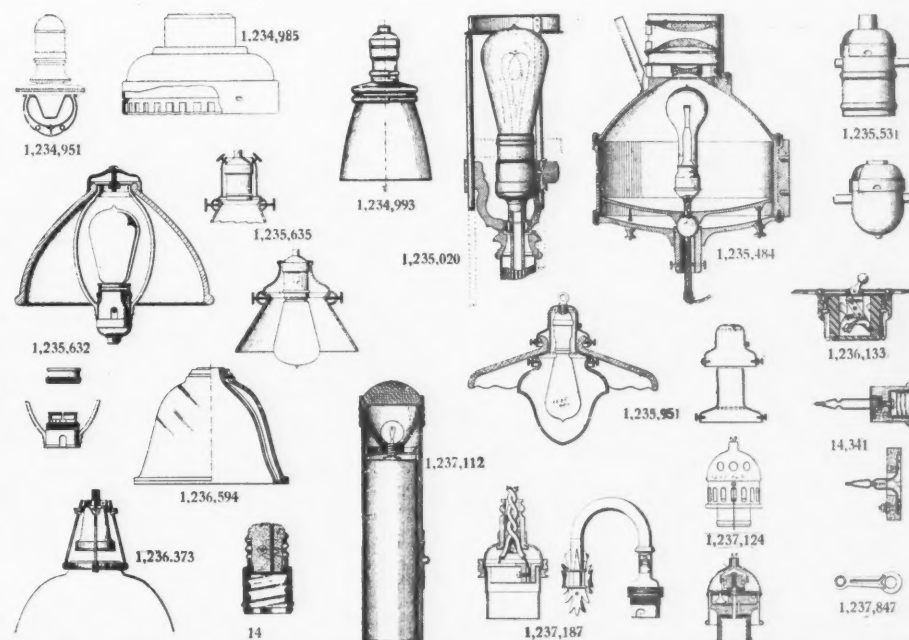
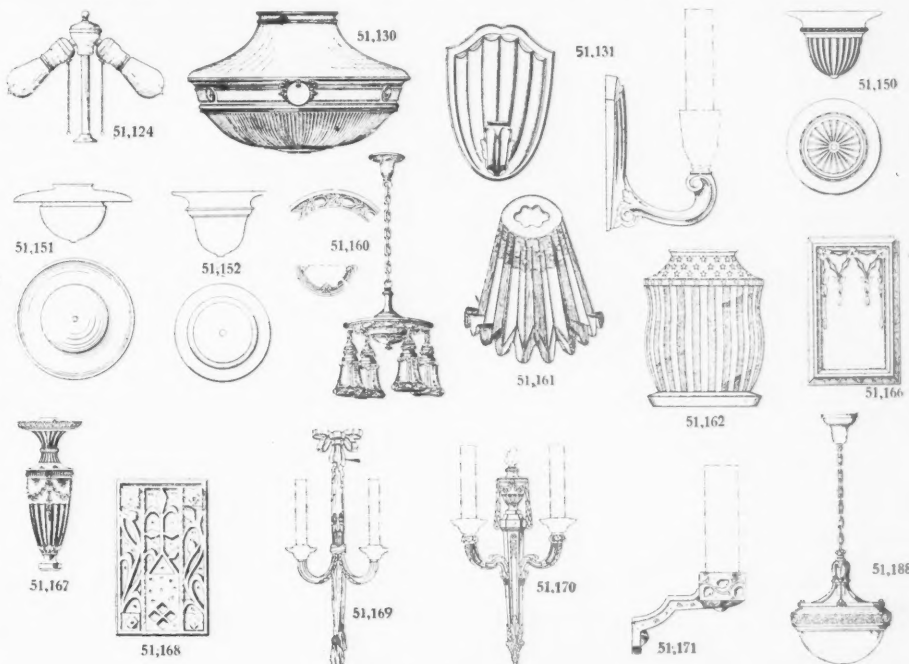
1,236,594. Illuminating Appliance. Otis A. Mygatt, New York, N. Y., assignor to Holophane Glass Company. Filed Dec. 31, 1915. Issued Aug. 14, 1917.

1,237,112. Portable Electric Light. George A. Soehnlein, Brooklyn, N. Y. Filed Oct. 5, 1916. Issued Aug. 14, 1917.

1,237,124. Electric Light Regulator. Leonard Sykes, Fort Wayne, Ind., assignor to Dudlo Manufacturing Company, Fort Wayne, Ind. Filed Nov. 4, 1916. Issued Aug. 14, 1917.

1,237,187. Holder for Incandescent Electric Lamps. George Edward Farrar, Perth, Western Australia, Australia. Filed April 11, 1917. Issued Aug. 14, 1917.

1,237,847. Process of Manufacturing Supports for Electric Lamp Sockets. Edwin L. White, Brooklyn, N. Y. Filed April 9, 1917. Issued Aug. 21, 1917.



Copies of illustrations and specifications of any of these patents may be obtained from Commissioner of Patents, Washington, D. C., for 5 cents each

Code of Lighting for School Buildings

Printing of the "Code of Lighting of School Buildings" is now under way by the Illuminating Engineering Society, 29 W. Thirty-ninth Street, New York City, and it is expected that advance copies will soon be ready for circulation. This code has been prepared by committees of the society in order to make available authoritative information for legislative bodies, school boards and others who are interested in enactments, rules and regulations for better school lighting, besides serving as a guide in individual efforts to improve lighting conditions.

GOSSIP OF THE TRADE



*Glimpses of Electrical Men as
Caught by Lens and Pencil*



Will You Help Solve the Submarine Menace?

For the benefit of inventive persons desiring to help find solutions for the submarine and other war problems, the United States Naval Consulting Board is issuing broadcast a timely pamphlet, "The Submarine and Kindred Problems," which states very plainly the conditions of submarine warfare and points out clearly the limitations of the ordinary attempts at a solution of the problem.

Besides calling attention to the popular misconceptions of the fundamental principles most frequently misunderstood, the pamphlet gives much in-



At seventy, Mr. Edison is one of the country's most indefatigable workers for the national defense. He is now devising methods to combat the U-boat menace and, only a week or two ago, surprised his laboratory assistants by suddenly journeying to Washington to confer first-hand with President Wilson. The picture shows Mr. Edison with a group of old-time telegrapher friends during a recent visit to his plant at Orange, N. J.

teresting information concerning the operation, detection and methods of attack and destruction of submarines. The booklet deserves the thoughtful study of every patriotic American who can bring inventive talent to bear on this most vital problem.

Thomas A. Edison is president of the Naval Consulting Board, and Dr. Peter Cooper Hewitt is vice-president. Copies of "The Submarine" booklet may be obtained from Thomas Robins, secretary of the Naval Consulting Board, 13 Park Row, New York City.

Purchasing Agents at Pitts- burgh, Oct. 9-11

The National Association of Purchasing Agents will hold its 1917 convention at the William Penn Hotel, Pittsburgh, Pa., on Oct. 9, 10 and 11. The president of the association is E. L. McGrew of the Standard Underground Cable Company. An attendance of 1500 members is expected.

Jovian Convention at New York City, Oct. 22 and 23

Jupiter Henry L. Doherty has called a convention of the Jovian Order to meet at the Hotel McAlpin, New York City, on Monday and Tuesday, Oct. 22 and 23. This convention, it is announced, will be of the utmost importance to Jovianism as there will be presented for acceptance or rejection extremely vital changes in the existing method of operation of the Order. Since in the opinion of many members, upon the enactment of the amendments proposed depends the future upward progress of the Order, a quorum of 200 members is especially desired. Ell C. Bennett, Syndicate Trust Building, St. Louis, is Mercury of the Jovian Order.

Brooklyn Contractors Co-op- erate in New Store-Wiring Plan

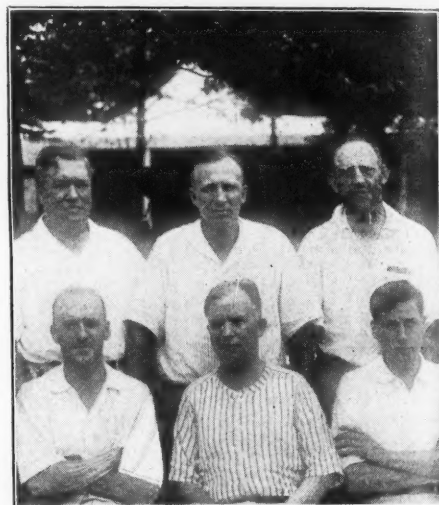
The Brooklyn Edison Company on Sept. 1 announced a new store-wiring plan for equipping old stores.

Easy monthly payments, at the rate of \$1 per unit installed, bring the proposition within the easy reach of every unwired store—no matter how small.

The customer may select his own contractor, the company paying the contractor in full on completion of the work, carrying out the same idea as in the house-wiring plan now in so successful operation in Brooklyn.

"Ernie" Haughton and Wife Killed in Auto Accident

Ernest H. Haughton, general manager of the Bryan-Marsh division, National Lamp Works of General Electric Company, Chicago, together with his wife, was killed Aug. 22 while on an automobile tour through the Adirondacks. Mr. Haughton graduated from the University of Nebraska with the class of 1895, later entering the selling field in the tire



Ernie Haughton, general manager of the Bryan-Marsh Company, Chicago, who with Mrs. Haughton was killed in an automobile accident in the Adirondacks on Aug. 22, is here shown photographed in the center of a group of his star sales staff, at Association Island last year. Sid Corby and Sam Fuerst appear on either side of Mr. Haughton.

business. In 1901 he entered the incandescent lamp business, selling lamps at first in Southern territory. In 1902 Mr. Haughton resigned from the Morgan Lamp Company and joined the Bryan-Marsh Company, which he served in the capacity of salesman until Oct. 1, 1902, when he became manager of the company's Cincinnati branch. In 1904, he became manager of the Chicago office.

Mr. Haughton, who was known to his friends in the electrical business as "Ernie," was the possessor of a strong, distinct personality. In his college days a baseball athlete (his cousin is Percy D. Haughton, the Harvard football coach), he never lost a certain strain of vigorous exuberance which was not always at first understood by those who did not know him, but this to his friends was merely his way of "working off steam." Paradoxically enough, he was one of the tenderest of men; his affection for his business associates was one of his noblest traits.

Massachusetts Contractors at Worcester, Sept. 20

The Massachusetts Electrical Contractors' Association will hold its annual meeting Sept. 20 at the Hotel Bancroft, Worcester, Mass. This will be a very important meeting, as it will mark an entirely new departure in association affairs. William L. Goodwin of California will address the members, outlining the plan which he proposes to submit to the members of the National Electrical Contractors' Association at New Orleans in October. Other addresses will be made by officers of the association and by invited guests. J. E. Wilson, 263 Summer Street, Boston, is secretary of the Massachusetts association.

Oregon Contractors Will Discuss Problems of the Industry

The Oregon Association of Electrical Contractors & Dealers will hold its second annual convention at Eugene, Ore., on Sept. 17 and 18. F. C. Green of Portland is president. The following papers will be presented:

"Business Methods and Outlook," by C. D. Rover, president of Eugene Bank of Commerce; "The Need of Proper Electrical Inspection and How



Fear not for the safety of democracy so long as there be patriots who play golf in their suspenders. Neil C. Hurley, president of the Hurley Machine Company, Chicago, is the gollufer in the galluses; incidentally we'll bet he can lick a whole foursome of "week-enders" in little-boy's pants and full-floating sleeves,—not excepting L. F. Philo, sales manager of the Robertson-Cataract Company of Buffalo, who appears at the right in the full regimentals of cow-pasture pool.

to Organize an Electrical Inspection Department," by F. Dunlap, chief electrical inspector bureau of buildings, Portland; "The Electrical Jobber," by J. I. Colwell, northwest manager Western Electric Company, Seattle; "The Electrical Contractor and Dealer," by J. H. Sroufe, Portland. Three-minute discussions will be held, after which there will be a banquet and other entertainment. The business meeting and election of officers will take place on the second day. The committee in charge of the convention includes P. B. Womeldorph, L. B. Sigwart, S. Jaggar, F. C. Green, J. R. Tomlinson, J. W. Oberender.

Meeting of Electrical Contractors of Georgia

At the convention of the Georgia Electrical Contractors' Association held at Tybee Island, Ga., on Aug. 13, President J. M. Clayton of Atlanta spoke at length on co-operation and the duty of electrical contractors toward the government at this time. Mr. Clayton declared that the association is on the eve of an era of great usefulness, as evidenced by its rapid growth. An address on "Co-operation" was also made by E. H. Grim, sales manager of the General Electric Company, Atlanta.

New by-laws were presented by a committee composed of T. H. McKinnly, Hunter Hogue and C. B. McGaukey, all of Atlanta, and adopted unanimously.

The nominating committee, com-

posed of H. J. Von Weller, C. F. Ludwig and F. J. Frie, reported the nomination of the following gentlemen, who were all elected unanimously: President, Norton Frierson, Savannah; first vice-president Joel H. Weir, Athens; second vice-president, Derando Levy, Columbus; treasurer, Gadsden Russell, Atlanta; secretary, Dan Carey. The following directors were appointed: F. M. Byrne, F. J. Frie, J. H. McNeil, K. D. White, C. B. McGaukey, J. M. Clayton, H. E. Lowe, H. J. Von Weller, C. F. Ludwig, Sylvester Byck. The executive committee is composed of C. F. Ludwig, chairman; Joel H. Weir, J. M. Clayton, C. B. McGaukey and Norton Frierson and Dan Carey, ex-officio. R. M. Walker, Atlanta, was elected national director to the N. E. C. A.

Michigan Contractors and Jobbers Plan to Co-operate

Through the efforts of W. L. Goodwin of New York, the electrical supply jobbers of Michigan have formed an association to discuss matters of mutual interest. Grand Rapids, Lansing, Saginaw and Detroit

(Continued on page 160)



When you take a taxi in Tokio it's a jinriksha. The picture shows Gerard Swope, vice-president and general sales manager of the Western Electric Company, orienting in the land of "Poor Butterfly" this summer. Mr. Swope's taste for modern design in vehicles is attested by the fact that he picked a model with one-man top, full elliptic springs and wire wheels. The chauffeur and prime mover are cast *en bloc*, and the drive is direct on all speeds.



Henry L. Doherty, Jovian Jupiter, telling Frank W. Smith, vice-president of the United Electric Light & Power Company, (at left), all about the days of real sport back in Denver when Henry L. was a care-free gas-and-electric salesman. Just at present, you know, Mr. Doherty is president of sixty-seven electric light companies, besides the Society for Electrical Development, and twenty or thirty gas and oil companies. And the gentleman camouflaging in a borrowed raincoat alongside Mr. Doherty is Frank Vanderlip, president of the National City Bank, New York, the country's biggest financial institution.

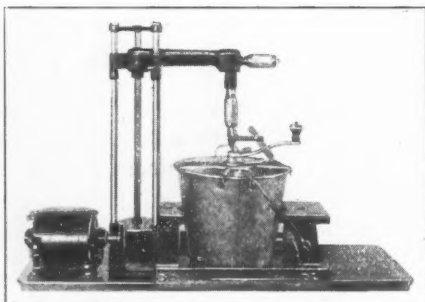
NEW MERCHANDISE TO SELL AND WHERE TO BUY IT

*Appliances, Socket Devices and Wiring Supplies Which
Manufacturers and Jobbers Are Putting on the Market*

Including Many New Appliances to LIGHTEN THE LABOR OF THE HOME

Electric Kitchen Unit

From ELECTRICAL MERCHANDISING, September, 1917

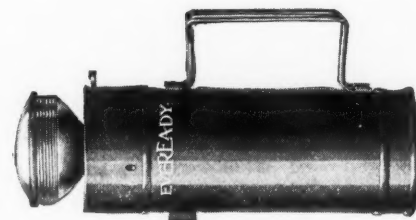


A motor-driven kitchen unit for converting the usual hand-operated kitchen devices into electrically operated machines is being manufactured by the Reynolds Electric Company, 422 South Talman Avenue, Chicago, Ill. Besides a high-speed shaft for use with a buffing and grinding wheel the machine carries both vertical and horizontal shafts to which cranks may be attached for making driving connection with bread mixers, ice-cream freezers, coffee mills and similar utensils. Holding hooks are provided to hold appliances firmly during operation.

Electric Battery Lamps

From ELECTRICAL MERCHANDISING, September, 1917

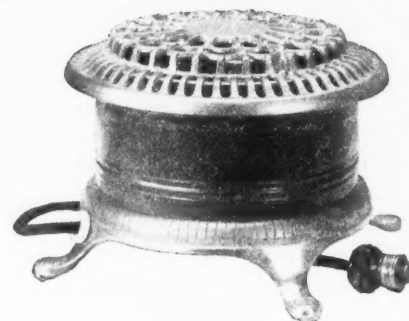
A portable lamp for use with the standard cylindrical type of dry battery is manufactured by the American Ever-Ready Works, Long Island City, New York. The "handy lamp" is made in two styles, one carrying the reflector on top. The other type has a side-mounted reflector, making a convenient table lamp. The case is finished in black enamel and is stormproof. A Mazda lamp is used in connection with a polished reflector and bull's-eye lens. Connection with the bulb is made through a conveniently located knife switch.



Electric Radiator

From ELECTRICAL MERCHANDISING, September, 1917

An electric radiator of open construction is being marketed by the Russell Electric Company, 140 West Austin Avenue, Chicago, Ill. The base and top are both made of iron castings, heavily nickel plated; while the intermediate portion consists of a blued steel drum. The top of the heater may be used as a foot rest. The style illustrated is rated at 660 watts, is 12 in. in diameter, 7.5 in. high and weighs 6 lb. A 1000-watt heater is made up in the same size and style. These sizes are furnished complete with 10 ft. of asbestos heater cord and separable attachment plugs. The company also makes 1500 and 2000-watt sizes.

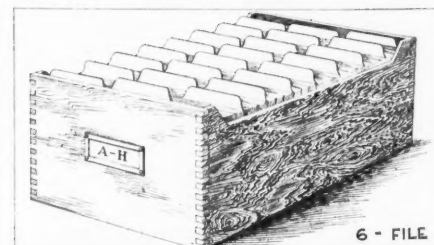
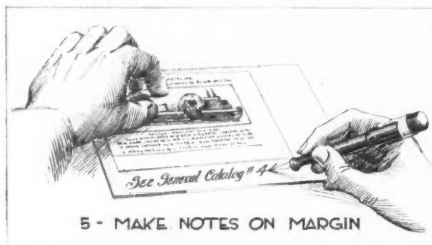
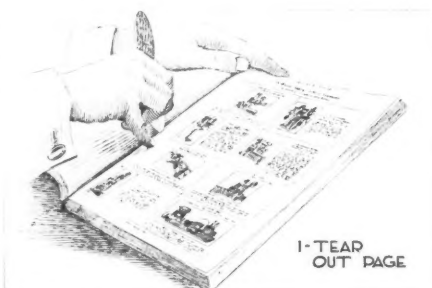


How to Use These Pages to Make Your Own Buying Index

HERE'S a great idea worked out. Of course you want an up-to-date catalog of new electrical products that fit your particular needs.

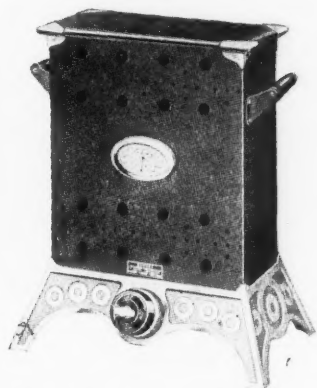
Beginning with this issue ELECTRICAL MERCHANDISING gives you a selective catalog service. By tearing out those items which affect your business and pasting them on filing cards you can make a buying index that will place information on what is made and who makes it right under your finger's end.

Every item with its illustration will fit a 3-in. by 5-in. filing card. So that there may be no interference between any two items, the "New Merchandise to Sell" articles are printed on one side of the page only. Many of our readers have been in the habit of clipping from this section since it was first established. With the new standardized arrangement ELECTRICAL MERCHANDISING hopes to broaden its service in this department materially, and hopes that each of its readers may cash in on the new service.



Portable Electric Air Heaters

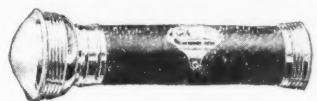
From ELECTRICAL MERCHANDISING, September, 1917



Portable electric air heaters that are especially desirable for sickrooms, bathrooms and bedrooms, nurseries, studios, box offices and similar places are made by the Hughes Electric Heating Company, 5660 West Taylor Street, Chicago. These heaters are instantly regulated, may be moved to any part of the room, do not diffuse noxious fumes and do not burn the oxygen of the air, it is claimed. These air heaters are made in six sizes, each with and without switches—ranging from 1000 watts to 4000 watts rating. The heaters have black-enamelled steel bodies and bases of cast iron finished in nickel.

Battery Flashlight That Can Be Carried in the Belt

From ELECTRICAL MERCHANDISING, September, 1917



The Beacon Electric Works, 132 King Street, New York City, announces the addition of a new pocket searchlight to its line of battery lamps. The new lamp is designed particularly for the vacationist and, the maker points out, it may be carried conveniently in the pocket or belt when not in use. A combination flash and permanent contact is provided. The finish is black and nickel.

Porcelain Pull Sockets and Receptacles

From ELECTRICAL MERCHANDISING, September, 1917



For outdoor installations, in factories, etc., where a metal pull socket would be seriously damaged by the weather, or other corroding influences, the General Electric Company, Schenectady, N. Y., has brought out a porcelain pull socket.

These sockets take the "standard" G. E. pull socket interior and are therefore interchangeable in metal and porcelain shells. They are furnished with 1/4 in. and 3/8 in. caps and pendant caps with 660-watt ratings. Receptacles are furnished with bases for cleat and concealed work, as well as bases for 3 1/4 in. and 4 in. outlet boxes. The caps, bodies and bases are interchangeable.

Three-Pint Percolator Pot

From ELECTRICAL MERCHANDISING, September, 1917

A new three-pint coffee percolator is announced by the General Electric Company, Schenectady, N. Y. The appliance is of solid copper, heavily nickel plated and polished. Both the pot and spout are made of formed metal so that there are no seams to open and cause leaks. The inside surface is coated with pure tin. The coffee container and the pump are of aluminum and are combined in one part. These, together with the cover and the aluminum distributor which spreads the dripping water over the coffee, are removable. The water (which may be cold) is placed in the pot and the ground coffee is placed in the coffee container, at the top of the pump tube. Within ninety-seconds after the current is turned on, the manufacturer states, steam is formed in the steam chamber and forces a jet of water up through the pump tube. The water strikes against the cover glass, falls back upon the distributor and drips through to be spread evenly over the coffee. It then percolates down through the coffee, extracting both the strength and flavor. With elec-

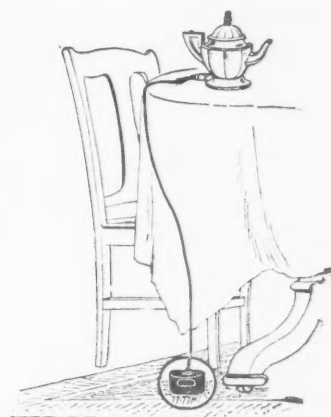


tricity at 10 cents per kilowatt-hour, the cost of making seven cups of coffee is less than 1 1/4 cents.

Dining Room Floor Receptacle and Plug

From ELECTRICAL MERCHANDISING, September, 1917

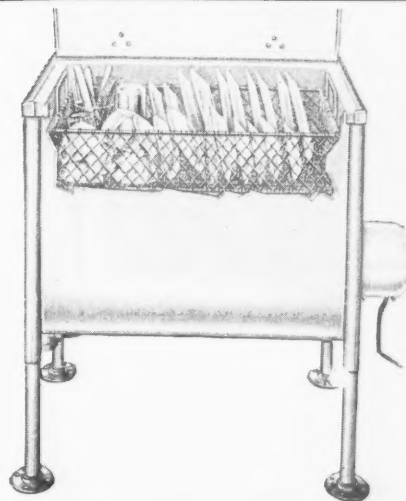
A receptacle and plug for use in connecting up dining-room table appliances is being manufactured by the Hart & Hegeman Manufacturing Company of Hartford, Conn. In dining rooms where indirect lighting fixtures are used, it is necessary to make the appliance connection through the floor and this plug is designed to penetrate the rug without damage to the fabric. The plug carries two sharp pointed prongs which are insulated to their tips in order to obviate danger of ground or short circuits. These sharp points, the manufacturer states, can be inserted into tapered holes beneath the rug very easily. Sliding shutters are used to close the openings of the receptacle the instant the prongs are removed, thus keeping out dust and dirt. This dustproof feature also makes the receptacle of value as a baseboard setting.



Electric Dish Washing Machine

From ELECTRICAL MERCHANDISING, September, 1917

In offering the new "minit" dish washing machine, the Kitchen Service Company, of 412 Orleans Street, Chicago, states that it is planning to produce this outfit in large quantities. The propellers and scoops of this machine, which move below the basket containing the dishes, are attached to a square shaft. By means of a spur gear the shaft is connected to an electric motor, and as it turns at about 600 r.p.m. the propellers throw the cleansing water over the dishes with great force. The manufacturer calls attention to the fact that the hot water comes in contact with all of the surfaces inside and out at the same time, thus making breakage due to expansion practically impossible. The legs of the machine are standard 1-in. wrought-iron pipes welded fast to the angle-iron framework. The motor is protected from splash by a metal housing which also prevents the possibility of clothing coming in contact with it. The body of the machine is finished in white enamel outside, rustproofed on the inside, and is trimmed with polished nickel.



5-Kw. Automatic Electric Plant

From ELECTRICAL MERCHANDISING, September, 1917

To meet the demand for a larger size automatic electric lighting plant, the Matthews Engineering Company, Sandusky, Ohio, announces the addition of a 5-Kw. set to its present 1 and 2-kw. models. This new unit performs all the functions of the smaller plants, starting and stopping automatically. It furnishes current for light and power, requiring no attention beyond replenishing the supply of fuel and oil. The engine is four-cylinder, 4-cycle, and develops 20 hp., giving it a reserve capacity for nearly 100 per cent overload. This, together with the fact that the set runs at the low speed of 900 rpm., the manufac-

turer points out, insures smooth, easy running and long life. The generator is especially designed for the work and is of General Electric make. It is directly connected to the engine through a flexible coupling. The entire power plant is mounted on a substantial base. The engine is water-cooled, the pump forcing water from a tank of large capacity through the cylinder jackets. This heated water is then returned to the water tank after being cooled by passing through an automobile type radiator, through which a fan forces a stream of air. The vacuum feed gasoline system provides a constant supply of fuel to the engine from the main gasoline tank, which may be installed underground outside the building. Thus there are never more than a few pints of gasoline inside the building.

Additional items of "New Merchandise to Sell" will be found on the second and third pages following.

(Continued from page 157)

are the cities represented, and the officers of the association are Christian J. Litscher of Grand Rapids, president; A. M. Collins, Western Electric Company, Detroit, vice-president; R. L. Kimble, Electric Supply Company, Saginaw, secretary.

The new Michigan jobbers' association and the Michigan Section of the National Electrical Contractors' Association held a joint meeting at



We were talking with a gentleman the other day who thought that the word "barbecue" meant the process of giving a Chinaman a haircut. H. S. Batchelder, commercial agent for the Western States Gas & Electric Company, labors under no such delusion however. When the Southern Sierras Power Company entertained the Pacific Coast Section of the N. E. L. A. at a real old-fashioned barbecue, "H. S." was the first man on the scene of activity, and here's photographic evidence to prove it.

the Pantlind Hotel, Grand Rapids, on Aug. 24, winding up with a dinner given by the jobbers to the contractor-dealers. The speaker of the evening was W. L. Goodwin, and after his address, committees were appointed by the contractors to confer with the jobbers to take up matters of mutual interest. The committee named to represent the contractor-dealers is as follows: Henry Roseberry, Grand Rapids; George Trombley, Saginaw; W. D. Crandall, Jackson; H. C. Pappert, Detroit, and Henry Desenberg, Kalamazoo.

Wisconsin Contractors Hold Boat-Ride Convention

The Electrical Contractors' Association of Wisconsin held its semi-annual meeting Aug. 16 to 18, making a boat trip up the Wolf River from Oshkosh to New London and return. The meeting was very well attended by contractors from all parts of the

State. Besides having a very enjoyable trip, much business was transacted, and the members all expect that much good will result from the meeting. J. C. Staff, 580 Jackson Street, Milwaukee, Wis., is secretary of the association.

Association of Motor-Maintenance Firms of New York City

To co-operate in credit and collection matters, and to provide a common meeting place for the discussion of technical questions connected with motor-repair work, the motor-maintenance firms of New York City organized in 1907 the Metropolitan Electrical Trade Association.

In 1909 the association was incorporated, and has ever since its conception faithfully served its members not only through its collection and credit protective system, but by the discussion of technical questions, and by considering and supporting proposed legislation that would affect and improve the condition of this branch of the electrical business—not forgetting at the same time social features which bring the members and their families together for an occasional evening's pleasure or for a day's outing in summer. The M. E. T. A. has now entered upon a hustling campaign to bring all electrical concerns in Greater New York doing repair work into its organization.

The officers and directors of the M. E. T. A. for the present year are: President, Louis F. Brown of the Paten Brown Company; vice-president, George M. Wheeler of the Maintenance Company; treasurer, H. F. Holbrook of the Thompson Bonney Company. Leopold F. Luedecke is secretary, with offices at 53 Park Row, New York City.

British Columbia Contractors Discuss Co-operation

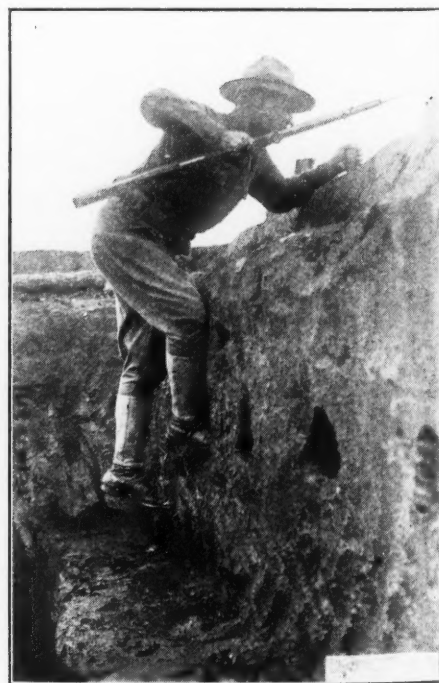
The British Columbia Association of Electrical Contractors and Dealers held its first annual convention in Vancouver on Sept. 10 and 11. Several subjects of importance were discussed, and in attendance were central station men as well as the jobbers and manufacturers. Albert

Elliott, a well-known speaker of San Francisco, presented the subject, "Co-operation Between the Manufacturer, Central Station, Jobber and Contractor Dealer."

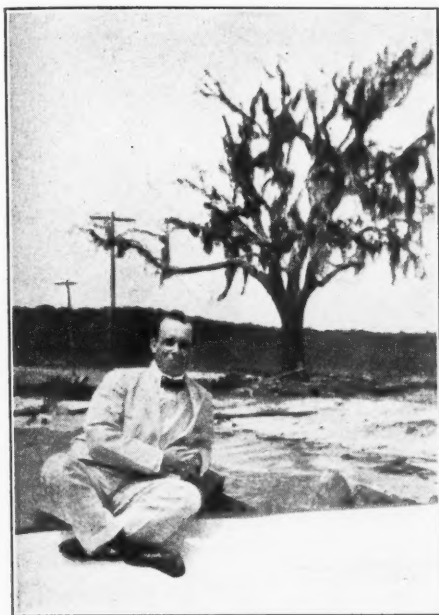
Members of the committee in charge of the convention were H. V. Rankin of Rankin & Cherrill; S. E. Jarvis of the Jarvis Electric Company; C. H. E. Williams; E. Brettell of the Electric Supply Company, Ltd., and J. E. Rowland of Mundy, Rowland & Company, all of Vancouver. The secretary of the association is R. B. W. Pirie, 406 Yorkshire Building, Vancouver.

Long Island Electrical Contractors and Dealers Meet

At the meeting of the Nassau-Suffolk Association of Electrical Contractors and Dealers, held Aug. 14 at Forresters Hall, Babylon, L. I., N. Y., the following officers were elected: President, R. M. Mansfield of Babylon; vice-president, George Geissler of Glen Cove; secretary, S. Howard Titus of Patchogue; treasurer, W. H. Aldrich of Patchogue. George Lascelle of Westbury and A. B. Westervelt of Roslyn were appointed members-at-large of the executive committee.



E. H. Robnett finds that quick action is essential, not only in securing Westinghouse orders around Baltimore, but in keeping ahead of the game at Fort Myer. In the intervals between "going over the top" and other warlike exercises, "Bobby" finds time to manage military balls in Washington.



W. E. Clement of the New Orleans Railway & Light Company taking things easy between sales campaigns. Mr. Clement it was who devised the simple but efficacious plan of jimmying into the customer's premises with electric service through the medium of a kitchen table all wired up with meter, fuse box and switch, and ready to operate a light or an iron on a moment's notice.

Electric Power Club at Hot Springs

The Electric Power Club will hold its next meeting probably at Hot Springs, Va., some time in November. The exact date has not yet been fixed. The officers of the club are: C. L. Collins, president, Cleveland, Ohio; F. S. Hunting, vice-president, Fort Wayne, Ind., and C. H. Roth, secretary-treasurer, Chicago, Ill. and members of the board of governors are: T. E. Barnum, Milwaukee, Wis.; James Burke, Erie, Pa.; E. R. Harding, Chicago, Ill.; J. C. Hobart, Cincinnati, Ohio; J. R. Jeffrey, Milwaukee, Wis.; W. A. Layman, St. Louis, Mo.; S. L. Nicholson, East Pittsburgh, Pa.; H. C. Petty, Ampere, N. J., and R. J. Russell, St. Louis, Mo.

I. E. S. Discusses Department Store Lighting

The Illuminating Engineering Society, New York Section, held its first meeting of the 1917 season on Sept. 13 in the Engineering Building, New York City. Two papers were presented—one, "Economics in the Operation of Large Lighting Installations," by C. L. Law and J. E. Buckley, and the other "General Level of Illumination Intensity in Large De-

partment Stores in New York City," by W. F. Little and J. F. Dick.

Edward L. Frantz has resigned as vice-president and general manager of the Frantz Premier Company, Cleveland, Ohio, of which concern he was the founder. One of the pioneers of the vacuum cleaner industry, Mr. Frantz foresaw that this device was destined to become a necessity in every household, and put on the market the Premier electric suction cleaner. Starting on a very small scale he began manufacturing these cleaners, and the product met with the instant approval of dealers and users. The business increased with big strides, the concern enlarged its quarters, and later the name of the cleaner was changed to the Frantz Premier.

D. R. Blaicher, purchasing agent for the Northern States Power Company with headquarters at Minneapolis, Minn., has been called to Washington, D. C., by the government to be a member of the board of electrical experts in charge of purchasing electrical equipment for the government cantonments. Mr. Blaicher expects to be in Washington about two months.

Charles B. Hart, former head of the new-business department of the Fort Wayne & Northern Indiana Traction Company, which supplies lighting and power service in Fort Wayne and many neighboring towns, has been made manager of the light and power department of this company.

Stephen Gardner, who for thirteen years has been connected with the sales office of the Westinghouse Electric & Manufacturing Company, has resigned to accept an executive position with the Greenlee interests of Chicago. Mr. Gardner entered the electrical business in 1896 in the employ of the Commonwealth Edison Company. Of recent years he has been handling the business of the Insull properties for the Westinghouse company.

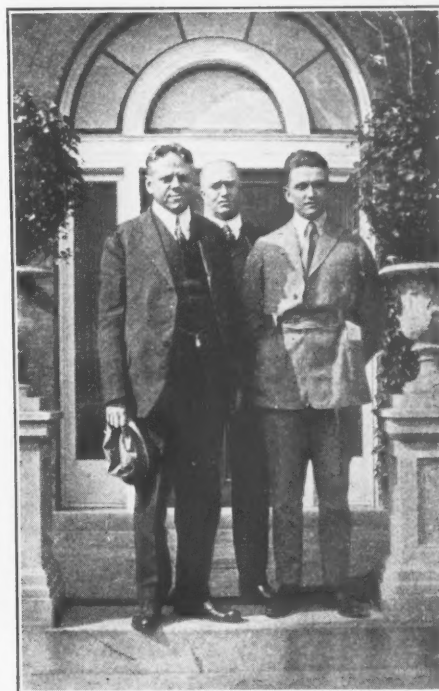
A. S. Dowell, Southwest Missouri salesman out of the St. Louis office of the Western Electric Company, has been commissioned a second lieutenant in the 3d Arkansas Infantry and is now serving with his company in a concentration camp near Little Rock.

Washington Contractors Meet with Electric Light Association

The Washington Association of Electrical Contractors and Dealers was scheduled to hold its second annual convention at Spokane, Wash., Sept. 13, 14 and 15. V. S. McKuney of Seattle is president. The following papers were scheduled on the official program:

"The Association Firing Line," by H. C. Rohrback, state representative of the Pacific Coast Conference Board; "The Relation of the Electrical Contractor to the Central Station," by O. B. Coldwell, general superintendent Portland Railway, Light & Power Company; "Co-operation Between the Electrical Contractor and Jobber," by W. S. Berry, Western Electric Company; "The Electrical Contractor," by Hugh L. Tinling;

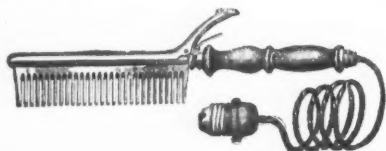
(Continued on page 164)



Ask Albert H. Elliot to speak on any subject under the red, round sun, from Aztecs to zenetrons, and watch how he, after deftly sketching the topic assigned, is in two minutes picturing to you glorious California, her golden sunshine, her magnificent mountains, her laughing waterfalls, her mighty sons who have gone East, and those who haven't, etc. And fifty-five minutes later when the spell-bound audience is asked by the dazed chairman, "Shall Mr. Elliot's time be extended and he proceed?" Listen to the thunderous vote, "Yes, yes, go on. Tell us more about your wondrous Coast countree!" For the liquid gold of the Golden Gate is in Albert H.'s gracious speech, and aside from private legal practice in San Francisco he is secretary and general counsel for the Pacific Coast electrical jobbers', dealers' and credit associations. Behind him stands W. Brewster Hall of Pass & Seymour, and alongside is Edgar Bernard of the Troy (N. Y.) Electrical Company.

Hair Dryer and Waver

From ELECTRICAL MERCHANDISING, September, 1917

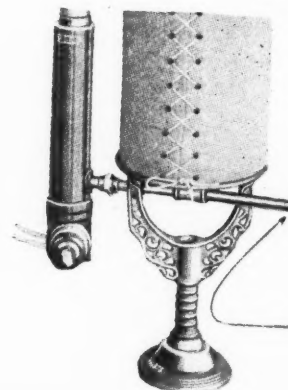


The Pelouze Manufacturing Company, 242 East Ohio Street, Chicago, has developed a combination hair curler and electrically heated comb. By slipping the comb attachment over the curling iron, a heating effect is obtained, which, according to the manufacturer, has a tonic effect upon the hair and scalp. A special regulating device is included to prevent the temperature from reaching a point that would burn the hair.

Continuous-Service Electric Water Heaters

From ELECTRICAL MERCHANDISING, September, 1917

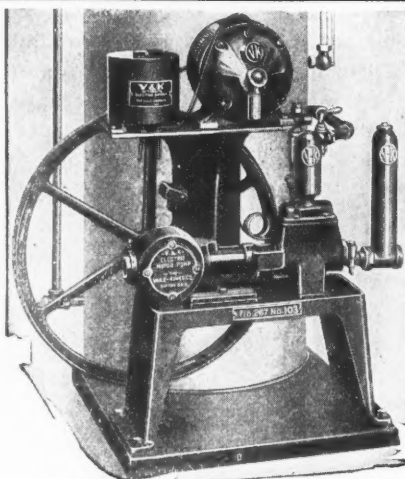
Electric water heaters of the circulation type that employ the thermal storage system—storing the hot water in the regular kitchen boiler—are made by the Hughes Electric Heating Company, 5660 West Taylor Street, Chicago. This type of water heater is made in two sizes for 750-watt and 2000-watt consumption. It consists primarily of a waterproof bayonet-type heating element inserted in a metal casing which is adequately insulated by a tightly packed insulating material $\frac{3}{4}$ in. thick. This heating element is placed squarely in the center of the water flow, and it is stated that all heat generated is absorbed into the water, making the heater 100 per cent efficient. This heater can be attached to any kitchen boiler in the same manner as the gas circulation heaters or the coal and wood water-back heaters are installed.



Electric Water Supply System

From ELECTRICAL MERCHANDISING, September, 1917

An automatic pump for isolated homes is being manufactured by the Valle-Kimes Company of Dayton, Ohio. Unusual quietness and freedom from maintenance trouble are claimed for the outfit. The pump is of the horizontal cylinder type with a single speed reduction from the Westinghouse motor and is specially designed to secure high starting effort. Water is pumped from the depth of 22 ft. or less into a tank against an air pressure of 30 to 50 lb. per square inch. The manufacturer calls attention to the fact that the equipment is entirely automatic and requires little or no attention after installing. A pressure actuated switch controls the motor so that the pressure in the system is maintained at all times at any value from 35 to 50 lb.



Battery Gas and Range Lighters

From ELECTRICAL MERCHANDISING, September, 1917



The American Ever-Ready Works, Long Island City, N. Y., is manufacturing a line of battery-operated lighters for gas lamps and ranges. The gas lighter is provided with a key socket for turning on the gas, and the curve of the tip makes it convenient for use with the mantle type of burner. The range lighter is especially designed for the lighting of gas stoves. With this device the hand is always a safe distance from the flame. A platinum resistance coil mounted in the perforated tip ignites the gas by becoming white hot upon the pressure of the thumb switch. The vulcanized fiber case contains a dry battery which can be renewed in the same manner as a tubular flashlight cell.

Single-Point Screw-Type Bracket

From ELECTRICAL MERCHANDISING, September, 1917



The National Metal Molding Company of Pittsburgh, Pa., has added to its line of wall brackets a single-point screw-type bracket like the one shown. The insulator on this bracket is of the same design as on other brackets made by this company; the necessity of using "tie-wires" has been entirely eliminated, and it is intended that the wires be threaded through "iron-bound" insulators, very similar in construction to strain insulators. The design of the insulators, however, is such that "tie-wires" may be used when desired.

This bracket, it is claimed, is especially adaptable for supporting wires along wood surfaces. A 2-in. No. 20 wood screw is firmly attached to the sherardized base, in such a manner as to entirely eliminate the possibility of its turning or pulling loose.

Electric Broiler

From ELECTRICAL MERCHANDISING, September, 1917

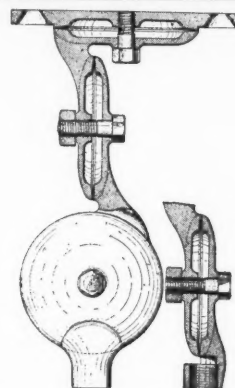
Among the new devices from the heating department of the General Electric Company, Schenectady, N. Y., is a compact electric broiler for hotel use. The broiler is an open compartment of sheet steel with an angle-iron frame. A sheathed-wire heating unit, with two heats, consuming 2500 and 5000 watts respectively, is located in the top of the broiling chamber. The top of the chamber is provided with 2 in. of heat-insulating material to prevent radiation of heat upwards. The heating unit is operated by the double-pole knife switch located on the top of the broiler. The broiler is furnished complete with a substantial drip pan and a gridiron on which the meat is placed. The gridiron is supported below the unit on a movable frame which may be raised, or lowered, by means of a lever on the side of the broiler near the front. The gridiron can also be drawn out of the broiler for turning, or removing the meats.



Adjustable Light Holder

From ELECTRICAL MERCHANDISING, September, 1917

The Franklin Specialty Manufacturing Company of Providence, R. I., has developed a permanent tension universal friction joint for use with light holders. In the accompanying illustration is shown the ceiling type, the principle of this type applying to the scores of combination joints and sizes already in use. The maximum frictional resistance is obtained by having the point of contact at the extreme outer edge of the disks. The hollowed-out centers produce a resilient tension which, it is claimed, remains constant for years without readjusting. The clamping screws pass through one disk and screw through the opposite disk. The nut locks the adjustment permanently.

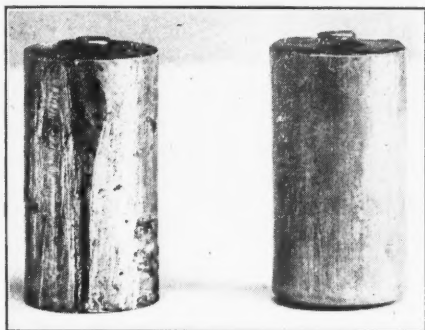
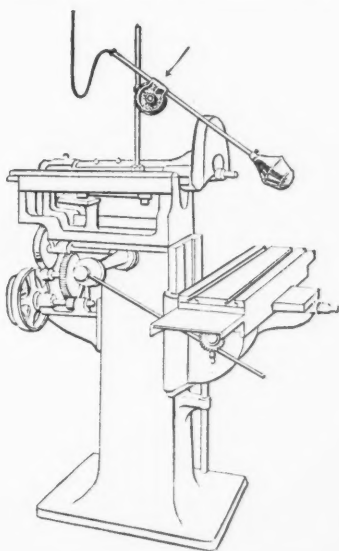


Clip These for Your Card File of New Merchandise 

Adjustable Lamp Fitting

From ELECTRICAL MERCHANDISING, September, 1917

W. N. Matthews & Brother, St. Louis, Mo., have placed on the market a fitting which consists simply of a universal joint that permits a lamp fixture clamped to it to be held in any position in which it is moved. The Matthews company is marketing only that part which contains the adjustable feature, and is not selling lighting fixtures with it. The device is made of 20-gage pressed steel. The friction plates are held together by a brass rivet, and it is said the tension of the plates will take care of practically all conditions where any adjustable fixture will be needed. It is made to fit standard $\frac{3}{8}$ -in. conduit galvanized and sheraduct and the standard $\frac{3}{8}$ -in. black iron pipe and $\frac{3}{8}$ -in. rod, which are usually in stock. With the adjustable device and the equipment an industrial plant already has it is possible to make all individual lamps adjustable.



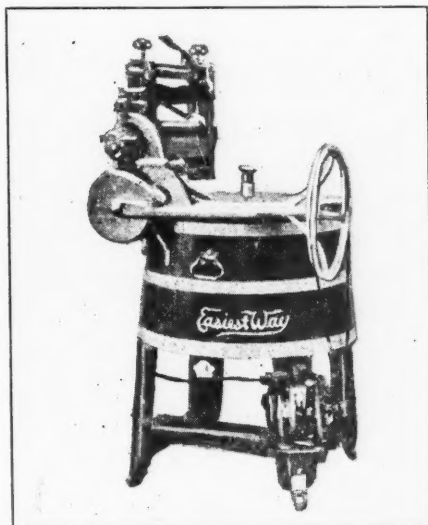
Seamless Flashlight Battery

From ELECTRICAL MERCHANDISING, September, 1917

A flashlight battery has been produced by the Usona Manufacturing Company, 1 Hudson Street, New York City, which is equipped with a seamless, one-piece zinc shell. The case is drawn from sheet zinc and, the manufacturer states, the construction eliminates those corrosion troubles common to the old style soldered case and adds considerable life to the cell. The illustration contrasts the round edge and smooth contour of the drawn zinc case with the two-piece soldered type.

Electric Washing Machine

From ELECTRICAL MERCHANDISING, September, 1917



An electric washing machine provided with a swinging wringer and known as the "No. 2" is being marketed by the Easiest Way Manufacturing Company, of Sandusky, Ohio. This manufacturer calls attention to the fact that with this new wringer the clothes may be turned from the washing machine to rinse water, from rinse water to blueing water and from there to the basket without moving the machine. One lever controls both wringer and washer. Both wringing and washing operations may be carried on at the same time. All gears and revolving mechanism are completely protected. A folding steel bench is supplied with this outfit without extra cost.

Double Tub Electric Washing Machine with Reversible Wringer

From ELECTRICAL MERCHANDISING, September, 1917

The White Lily Manufacturing Company of Davenport, Iowa, announces a new twin tub electric washing machine. Two complete outfits are built on one framework, to which is also attached a steel folding tub rack for the rinsing and blueing tubs. The wringers are of reversible type and handle the wringing for both washing and rinsing tubs. All gearing for operating the machine is mounted on the heavy frame underneath the tubs. Aluminum is used for all metal parts on the inside of the machine so as to prevent rust.



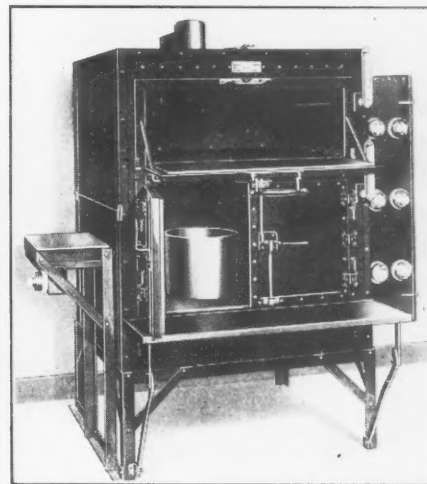
Electric Grill

From ELECTRICAL MERCHANDISING, September, 1917

With the radiant electric grill made by the Hotpoint Electric Heating Company, Ontario, Cal., three heats are provided. Food may be started on the "high" heat, and when brought to the boiling point the "medium" or "low" connection used to complete the cooking. A composition switch plug with three receptacle positions provides for the changing of heats. It is pointed out by the manufacturer that by placing food both above and below the heating element, two cooking operations may be carried on at the same time.

Electric Oven for Army Use

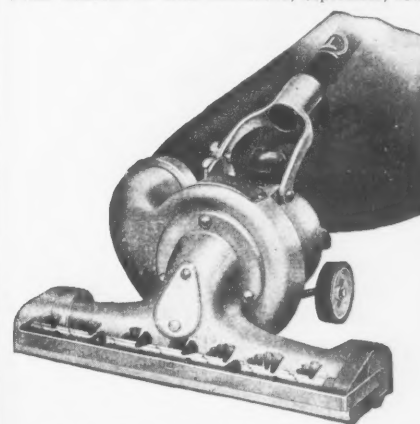
From ELECTRICAL MERCHANDISING, September, 1917



The electric oven illustrated herewith has been developed by the Hughes Electric Heating Company, Chicago, and submitted to the War Department of the United States for possible adoption for army cooking. This oven is designed to take care of baking, boiling and frying operations necessary in the feeding of about 150 men. It is unique in that it is the first oven to be designed to perform all of these various cooking operations at one time. The hot-plate which is bracketed to the oven will accommodate the standard United States army coffee receptacle. The oven is rated at 15 kw.

Electric Vacuum Cleaner

From ELECTRICAL MERCHANDISING, September, 1917



The Innovation Electric Company, 585-589 Hudson Street, New York City, is marketing an electric vacuum cleaner with a traction-driven rotary brush. A special adjusting device is provided to enable the operator to set the nozzle for any thickness of carpet. The handle is adjustable, with a rigid pistol grip and can be locked to hold the machine in any desired position. A push button control and cord holder are located on the outside of the handle. The "Liberty" cleaner is driven by a universal General Electric Motor, which is horizontally mounted.

Additional Items of New Merchandise to Sell Will Be Found on the Second and Third Pages Following

(Continued from page 161)

and "The Inspector's Viewpoint," by W. A. Davis.

On the first day a joint meeting was held with the Northwest Electric Light and Power Association, the subject under discussion being "Co-operation in Modern Home and Apartment-House Wiring Practice." Harry Byrne addressed the contractors and jobbers at dinner, and Albert H. Elliott of San Francisco spoke on "Co-operation."



Here's Albert Gentel of Philadelphia looking all smiling because he had just been elected president of the Pennsylvania Electrical Contractors' Association. And there on the right is M. E. Arnold, also of Philadelphia, looking equally tickled because he has just resigned the cares of the self-same presidency in Mr. Gentel's favor. And in these busy, hustling days, we think that Mrs. Arnold's husband wins.

The Hughes Electric Heating Company has just issued an exceedingly handsome catalog and counter book, describing its electric bake ovens, industrial ovens, hot plates, portable ovens, air heaters, toy ranges, engine and carburetor heaters and hotel kitchen equipment, including large electric toasters, broilers, plate warmers, frying griddles and coffee iron heaters. The book—which is handsomely and profusely illustrated with pictures of electric ranges and cooking equipment, and also apartment houses where electric ranges are in use—traces the history of the Hughes Electric Heating Company, which since 1910 has had a phenomenal growth from the limited quarters in which Mr. George A. Hughes began operations seven years ago, to the present great factory at 5630 West Taylor Street, Chicago, Ill.

The Robbins & Myers Company of Springfield, Ohio, has announced two bonus plans by which its employees will share the fruits of their own endeavors. One of these plans is known as the "perfect attendance" bonus system, and provides for paying 3 per cent of his straight time earnings to any employee with a record of thirty consecutive and perfect days for attendance and time punched in and out. The amount is increased with the first three sets of thirty days, after which it remains at 5 per cent for each perfect period. Under the conditions of the second or "service" plan, bonuses are distributed on a basis of continuous service, and begin with 1.5 per cent of the workman's earnings for the man who has been with the firm six months. For five years and above the percentage is 10. Bonuses are figured upon the total earnings during the quarter in which they are paid.

The Westinghouse Company's St. Louis sales office has furnished five officers for the U. S. Army Engineer Corps. A. L. Faber was industrial salesman, H. C. Thomas and J. H. Waxman were supply salesmen, D. H. Lyford and E. S. King were railway and lighting salesmen and J. S. Hood was a correspondent. All enlisted for the officers' training courses at Western camps and received their preliminary training at those camps. The five have now been commissioned lieutenants in the Engineering Corps and have been assigned to another camp for special military engineering instruction and training.

Clinton Doyert, who has been representing the St. Louis branch house of the Western Electric Company in southeast Missouri, has been appointed sergeant-major of the 6th Regiment, Missouri National Guard, and is now in a training camp in that State.

The National Sweeper Company has issued a two-color booklet on its "Torrington" electric cleaners, entitled "Woman's Greatest Labor Saver."

H. G. Ramsey, electrical dealer and contractor, Uxbridge, Mass., has been granted the contract to install wiring in 153 houses for the Fisher Manufacturing Company, Fisherville, Mass.

Walter J. Warner, who has been manager of the industrial department for W. N. Matthews & Brother of St. Louis, has been commissioned lieutenant-colonel of the 1st Missouri Artillery. He has therefore resigned his position with the Matthews concern and is serving with his regiment in a camp in Missouri.

C. H. Taylor, railway salesman for the Westinghouse Electric & Manufacturing Company at its Kansas City office, has been selected for the second officers' training course for the United States Army. He will report at Fort Reilly, Kan., in the near future for instruction.

N. C. Cooley, who for a number of years has been connected with the sales department of W. N. Matthew & Brother of St. Louis, has enlisted in Battery B of the 1st Missouri Artillery and is now in a training camp near St. Louis.

I. P. Frink, Inc., Twenty-fourth Street and Tenth Avenue, New York City, has issued a twelve-page booklet on "Lighting Service for Hospitals."



F. J. Gottron, sales manager of the P. A. Geier Company, Cleveland, Ohio, reports that there are very few fish left in the Georgian Bay district since his recent fishing trip, and submits the above photograph as proof of his claim. Of course, the biggest one got away.

The Standard Stamping Company, manufacturer of hardware and electrical supplies, has moved from Marysville to its new extensive "daylight" plant in Huntington, W. Va. Because of the better facilities afforded by the new equipment and location, the company expects to improve its service materially.

Douglas S. Anderson has been appointed local representative of the Illuminating Engineering Society at New Orleans, La.



Here's a man who believes in going higher up, and if we were a recruiting officer we'd invite him to become an aviator. He is F. S. Montgomery, advertising manager of the National Metal Molding Company, Pittsburgh, Pa. As you can see for yourself, he believes in getting what he is after, even if it necessitates getting up in the air once in a while.

R. W. Canterbury has sold his interest in the Electric Shop, Piqua, Ohio, and has opened a new office at 315 Franklin Street in that city. He announces that he will be glad to receive catalogs and price lists from electrical jobbers and from manufacturers.

The **A. B. Wilson Company** of Cleveland, Ohio, which was organized in 1914 as a manufacturer's agency for electrical specialties, has outgrown its original office and moved to more spacious quarters in the Leader-News Building, Cleveland. The business has developed from local representation to the sole sales agency as well as the manufacture of three main products—Burr efficiency units, "Perfection 66" switch boxes and Snover loom fasteners. The A. B. Wilson Company is represented by the Doherty-Hafner Company at Chicago, Arthur Organ at New York, the Brown & Hall Supply Company at St. Louis, S. M. Hofheimer at Philadelphia, and M. V. Simpson at Los Angeles, and operates through its own special representatives in the central territory east of the Mississippi River.

The **Electric Contractors' Supply Company** of 714 Mulberry Street, Des Moines, Iowa, announces the opening of a branch store in Sioux City, Iowa, with **Matthew J. Donahue** in charge.

John Shoolbred has recently been added to the Boston staff of the Westinghouse Electric & Manufacturing Company as a commercial engineer on industrial motor problems.

R. M. Keck has been appointed a supply department salesman of the Westinghouse Electric & Manufacturing Company at Dallas, Tex., succeeding **D. S. Pryde**, who has resigned.

The **Trumbull Electric Manufacturing Company**, manufacturers of electrical supplies, Plainville, Conn., is building an extensive addition to its plant, in order to take care of its requirements. The new addition, according to **L. L. Brastow**, sales manager, will be ready sometime before the first of the year.

Sperry & Bittner, Pittsburgh, Pa., is the name of a new firm which has just opened offices in the First National Bank Building as manufacturers' agents. **Ralph C. Sperry**, one member of the firm, was formerly Pittsburgh district manager of the Brilliant Electric division of the National Lamp Works. **William A. Bittner**, the other member, has for the last ten years been connected with the Union Electric Company of Pittsburgh as office manager and purchasing agent. At present **Sperry & Bittner** represent the Steel City Electric Company of Pittsburgh, A. O. Schoonmaker Company of New York City, and the Argus Lamp and

Appliance Company of Cleveland, Ohio.

The **American Conduit Manufacturing Company** announces that on Sept. 22 its factory will be moved to New Kensington, Pa., and that all mail intended for the firm should be addressed to that location.

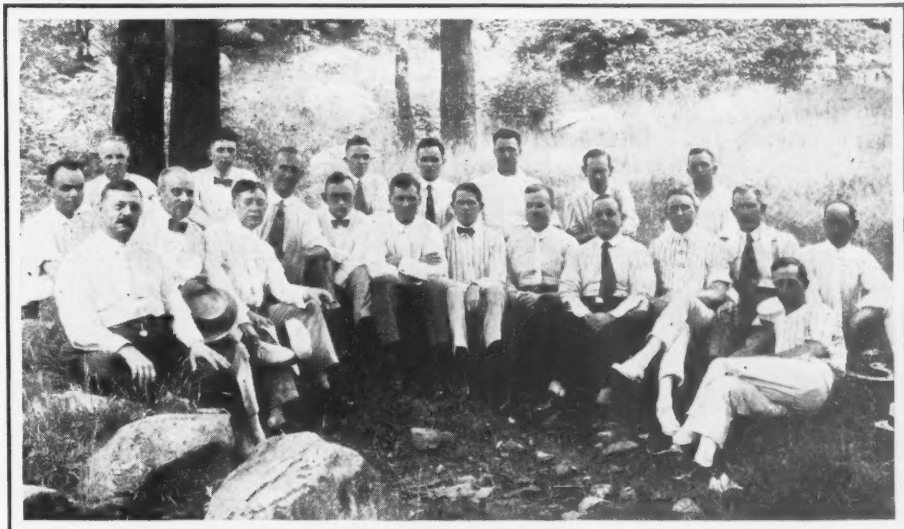
Robert Montgomery, manager of the commercial department of the Louisville Gas & Electric Company, Louisville, Ky., has passed the examination for admission to the next Officers' Training Camp at Fort Benjamin Harrison in Indiana.

C. M. Masson was recently named as local representative of the Illuminating Engineering Society for Los Angeles, Cal.

H. P. ("Pat") Ryan, who has been household-device specialist for the Western Electric Company in its St. Louis office, has enlisted in the United States Marine Corps and has been ordered to Port Royal, N. C., for training.

Raymond T. Baldwin, a director of the Lux Manufacturing Company, Hoboken, N. J., has just returned to France, where he will serve in the aviation department of the United States. Mr. Baldwin has spent the last year in France in the service of the Harje formation, a hospital division composed of former Harvard students.

(Continued on page 168)



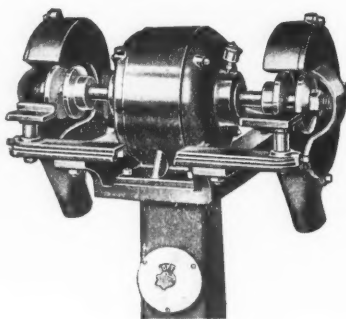
"Lighten home labor where you are,
Make easy housework your guiding star;
Electric suction cleaning is the simplest way by far
To lighten home labor where you are."

That isn't just the way **W. Sunday, D.D.** wrote it, but can't you imagine this bunch of National Sweeper salesmen pulling the close harmony in their rustic conclave? The convention began at Torrington, Conn., but the exact location of this sylvan dell is not disclosed by our photographer.

Electric Driven Grinder

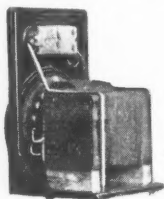
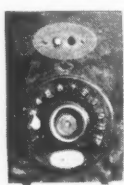
From ELECTRICAL MERCHANDISING, September, 1917

A new line of direct-connected electric driven grinders and buffing lathes is being marketed by Webster & Perks Tool Company, Springfield, Ohio. High pedestals are provided on these grinders for floor mountings and the smaller sizes carry a shelf on the pedestal for tools. The larger sizes are provided with a door in the pedestal which gives access to a large tool compartment. The grinding wheels are covered by heavy guards and provision is made for connection with a dust exhaustion system. The ball-bearing type motors are fully inclosed. On the larger grinders outboard bearings are used. The motors range in size from 1 to 5 hp. and are made by the Robbins & Myers Company of Springfield, Ohio.



Variable-Speed Controller

From ELECTRICAL MERCHANDISING, September, 1917



The Northwestern Electric Company of Chicago has brought out a controller for printing-press motors. The controller is

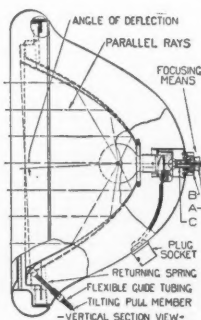
built in 1-hp. and 6-hp. styles. The 1-hp. type consists of a push-button switch, a transformer and an indicating dial. By means of the transformer the speed of the motor is varied by changing the applied voltage in 5.5-volt steps.

The 6-hp controller is similar to the 1-hp. unit except that it is arranged for reversing and for inching the motor. A triple-pole, double-throw switch is connected so that two blades are used for the series field, and the third blade is connected to the no-voltage release coil on the magnetic switch. When the pointer on the control dial is in the inching position, the third blade of the switch is open. When the starting button is pressed under these conditions the machine starts, but is immediately stopped because no current is passing through the no-voltage release coil.

Auto Headlight with Tilting Mechanism

From ELECTRICAL MERCHANDISING, September, 1917

The Benjamin Electric Manufacturing Company of Chicago has developed a tilting reflector with means for controlling from the steering wheel. Through the use of this reflector the light zone is limited to the roadway, and there is no necessity for diminishing the intensity of illumination. The principle of the equipment is not to diffuse or dim, but to control the projected light by changing the position of the reflector from the steering wheel. The reflector is pivoted on a horizontal axis passing through the lamp center, carefully balanced and held in normal position by a returning spring. At all times the angle of the beam (also the reflector) is under the instant control of the driver. The highest point of the beam when



the reflector is set at a full-tilted angle is but 36 in. from the ground. This can be made less if desired.

Changeable Electric Sign

From ELECTRICAL MERCHANDISING, September, 1917

A changeable-letter, indoor electric sign that can be made to harmonize with the color and architectural characteristics of any store surroundings is being manufactured by the Viking Sign Company, Inc., 527 Fifth Avenue, New York City.

The sign in its simplest form consists of an oblong box equipped with one or more standard electric light bulbs. The face carries interchangeable molded glass letters, permitting the formation of any desired name or sentence.

The glass letters are mounted in metal plates which slide snugly in the grooves forming the front edge of the box. There is a second groove directly behind the let-

ter groove in which color screens may be placed when it is desired that the letters shall radiate colors other than natural white. Aside from novel effects, the color feature has the advantage of permitting the sign to be made to harmonize with any fabrics or wearing apparel displayed near the sign or in contrast or harmony with any interior color scheme.

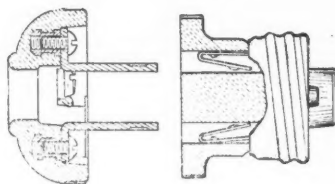
In order to make the sign fit in with the architectural features of stores and display windows the box may be fitted with various types of decorations and pedestals. The signs are normally furnished in statuary bronze color, although special colors are furnished on order. The outfits are completely equipped with lamps, cords and plugs, and the manufacturer calls attention to the fact that the electrical features have been approved by the Underwriters Laboratories.

Interchangeable Plugs and Receptacles

From ELECTRICAL MERCHANDISING, September, 1917

The Arrow Electric Company, Hartford, Conn., is manufacturing a complete and interchangeable line of "standard" plugs and receptacles. The attachment plug is separable. The plug body is threaded for Edison base outlets and the plug cap acts as an adapter for thirteen different body parts.

All the springs in these plugs and receptacles are reinforced. The manufacturer points out that this insures a perfect contact, no matter how often the plug is inserted or withdrawn.



Six attachment plug manufacturers are making the "standard" line. It will give an interchangeable and uniform method of attaching appliances.

Reversible Split Knob

From ELECTRICAL MERCHANDISING, September, 1917

The Findlay Electric Porcelain Company of Findlay, Ohio, has brought out a reversible knob with two available wire grooves and an interlocking feature which keeps the pieces in place while the knob is being installed. It has liberal screw protection and can be installed with screws or nails. The wire way is triangular, insuring a tight grip.

A Pendant Switch That Will Not Corrode

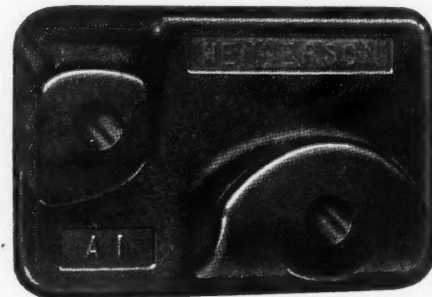
From ELECTRICAL MERCHANDISING, September, 1917



A new all-porcelain pendant switch for use in factories, cellars, stores and refrigerators has been designed by the General Electric Company, Schenectady, N. Y. The new switch is small and compact. The operating mechanism is quick make and break and is rated at 3 amp. 250 volts and 6 amp. 125 volts. The outer porcelain shell is in two parts.

Bench Conduit Bender

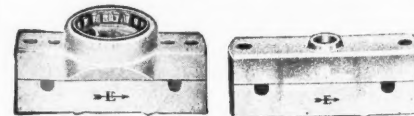
From ELECTRICAL MERCHANDISING, September, 1917



The Henderson Electric Company of Am-
pere, N. J., is making a one-piece conduit
bender designed to be mounted on a post,
or installed flat on a bench. Any combina-
tion of bends and offsets may be made with
this device, the manufacturer points out,
without kinking or flattening. Three sizes
are made to handle 1/2 in., 3/4 in. and 1 in.
conduit, respectively. The western distributor
of the bender is M. B. Austin & Com-
pany, 700-710 Jackson Boulevard, Chicago.

Cleat Wiring Devices with Concealed Terminals

From ELECTRICAL MERCHANDISING, September, 1917

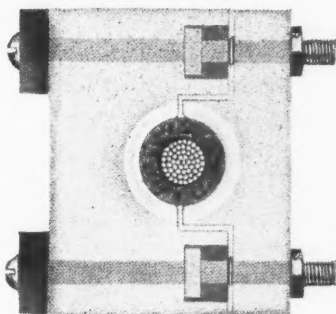


Two new devices for cleat wiring provided with concealed terminals have been brought out by the Arrow Electric Company of Hartford, Conn. One of these is a plain porcelain fuseless rosette and the other is a base for use with the firm's interchangeable brass shell line. With this base, the company points out, it is possible to make up a complete line of sockets—Key, keyless and pull—with all of the firm's special modifications. It is stated that these two devices in connection with the standard porcelain keyless cleat receptacles made by the company offer a complete group for use in cleat wiring cases which call for concealed terminals.

Cleat-Type Insulator

From ELECTRICAL MERCHANDISING, September, 1917

Cleat-type insulators, designed particularly for high-voltage switchboard construction, that lend themselves to low voltage work as well, are made by the Electric Development & Machine Company of Philadelphia. The clamping members composing the insulator grip the cable uniformly between two circular tube-like surfaces approximately 2 in. in length. All edges are rounded to avoid any possibility of injuring the cable covering because of forcing sharp corners or grooved inner surfaces into the insulation. It is pointed out that this type of insulator practically doubles the length of surface leakage path to ground. Attention is called to the fact that the lower half of the insulator may be bolted to its support and properly aligned before the wire or insulated bus is fastened in position. The Philadelphia Electric Company,



Supply Department, 132 South Eleventh Street, Philadelphia, is the selling agent for this cleat insulator.

Conduit Box Receptacle

From ELECTRICAL MERCHANDISING, September, 1917

To meet the demand for floor outlets occasioned by the rapidly growing use of portable lamps and auxiliary heating devices the General Electric Company, Schenectady, N. Y., has produced a "standard" conduit box receptacle with adapter cap and steel strap for use with Sprague or Thomas & Betts small non-adjustable floor outlet boxes.

This type of outlet has been developed to provide current supply to portables of all kinds, fans, heating devices, etc., from an outlet in the floor. If the device is installed under a rug a small opening is made so that the stem of the adapter can be inserted. This stem is the only part of the device appearing above the surface of the rug. When used on power or heating circuits the rating is 10 amp. and 250 volts.

Adjustable Cable-Reel Jack

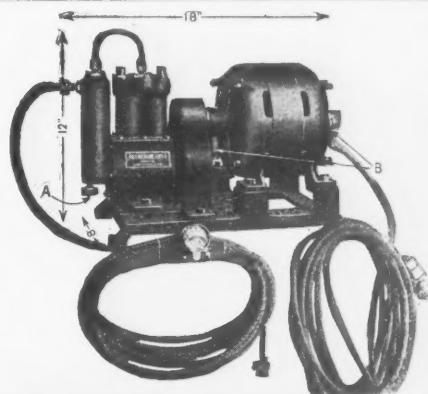
From ELECTRICAL MERCHANDISING, September, 1917

The A. L. Swett Iron Works, Medina, N. Y., have developed a cable-reel jack that is constructed to carry a heavy load and at the same time is light enough to be easily portable. This jack is made in two sizes. The small size has a screw 14 in. long with the height of stand to bearing point in yoke 20.5 in. When the screw is up to the limit in this design the height to the bearing point in the yoke is 31 in. The large cable-reel jack has a length of screw 16 in., with a height of stand 26 in., so that when the screw is up to the limit the height to bearing point in the yoke is 42 in. It is said that this jack will swing a 7000-lb. reel.

Electric Garage Pump

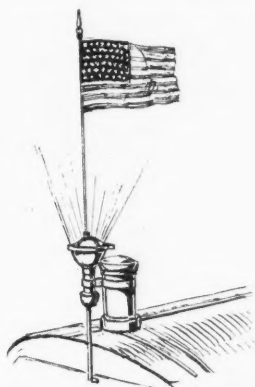
From ELECTRICAL MERCHANDISING, September, 1917

An electric air pump for tire inflation and intended primarily for the private garage has been designed by the Hartford (Conn.) Machine Screw Company. The equipment consists of a two-cylinder pump, mounted on a metal standard and driven by a 1/2-hp. General Electric motor. Twenty feet of reinforced air hose and an attached pressure gage are furnished with each outfit. Twenty feet of extension cord and attachment plug are also included. With the pump, the manufacturer states, a 37-in. x 5-in. tire may be inflated to a pressure of 90 lb. per square inch in less than three minutes.



Spotlighting the Automobile Flag

From ELECTRICAL MERCHANDISING, September, 1917

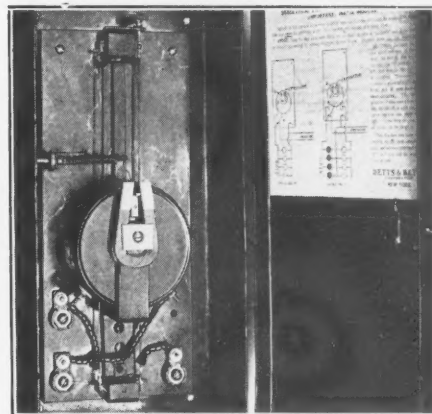


An electric lamp for illuminating a radiator flag, which may also be used as a portable inspection lamp, is being marketed by the Flaglite Sales Corporation, 1790 Broadway, New York City. The outfit includes a silk flag, a silver-plated parabolic reflector and a rubber-finished rolled steel bracket.

Motorless Flasher

From ELECTRICAL MERCHANDISING, September, 1917

The "Vacu motorless flasher," made by the Betts & Betts Corporation, 511 West Forty-second Street, New York City, is a unique departure from other types of thermostatic flashing devices, because of the method of disrupting the arc. In the case of this circuit controlling device the circular box contains a glass tube, from which the air has been exhausted. A puddle of mercury floats in the tube, and in each end as well as the center there is a platinum leading-in wire. A rocking arm is operated by resistance wires, these heating and cooling continually while the flasher is in operation. The rocking arm is attached to the metal case containing the tube, which is thus tilted back and forth, either "making" and "breaking" a circuit, or alternating two circuits as the case may be. Since there is no oxygen in the tube, the maker points out there is no deterioration in the contact surface.



Floodlighting Projectors

From ELECTRICAL MERCHANDISING, September, 1917

The new line of floodlighting projectors just announced by the Electric Service Supplies Company, Seventeenth and Cambria Streets, Philadelphia, embodies the use of a 14-in. glass mirror, either of "golden glow" or "crystal" glass. These mirrors are true paraboloids: they are first pressed to shape in molds, the inside then being polished by a special patented process; the outside or back surface is then ground to a mathematically exact curve and later polished. After this it is given a heavy backing of silver, which in turn is copper-plated, and the copper finally coated with a compound to make it impervious to moisture, gas or other agents. The only difference between "crystal" and "golden glow" mirrors is the quality of the glass employed, the former being of clear crystal glass, while the latter is greenish-yellow in color. The white light is recommended for the illumination of monuments, public buildings and in other cases where lighting the subject as a whole is the main consideration. For all subjects on which the eye must be able to disclose fine detail and must be used continually upon the illuminated area or object, the manufacturer recommends the soft yellow light.

Both of the 14-in. mirror projectors are adapted to take a 400-watt Mazda C concentrated filament floodlighting bulb. By the use of an adapter any screw-base lamp may be employed.



Sixty-Day Portable Signal Battery

From ELECTRICAL MERCHANDISING, September, 1917

Portable signal batteries which, it is claimed, will operate a busy signal circuit for sixty days on one charge, even in summer weather, have recently been put on the market by the Electric Storage Battery Company, Philadelphia. Attention is called to the fact that the grids and separators have been made more rugged, the rubber jars more substantial, and additional sediment space provided. A double-flanged cover is used, which protects the upper edges of the jar from mechanical injury, while the automatic vent and filling plug prevent careless overfilling of the cells and the consequent slopping of electrolyte over the covers and carrying case. This cover also acts as a spray trap, preventing the escape of acid spray while charging. The increase from thirty-day to sixty-day service is largely obtained by a design of cell which eliminates internal losses, rather than by increasing the amount of active material, since the sixty-day battery weighs only 25 per cent more than the thirty-day battery.

The N. E. C. A. "Special" from New York to New Orleans

James R. Strong, 114 West Thirtieth Street, New York, past-president of the N. E. C. A., is arranging for special cars from New York to New Orleans, via the Pennsylvania and Southern railroads, arriving at New Orleans on Tuesday morning in ample time for the "Round Table" on Cost Data scheduled for that day. All N. E. C. A. members and their friends interested are invited to join the party.

The train is to leave New York on Sunday, Oct. 7, at 4.35 p. m., arriving in New Orleans on Tuesday, Oct. 9, at 7.30 a. m. On the return trip it is planned to leave the Creole City on the 14th and arrive in the big town at 1.40 o'clock in the afternoon of Oct. 16.

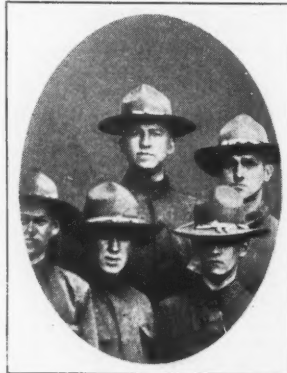
In a letter sent to electrical men in the New York district, giving details of the proposed New York "special," Mr. Strong points out that considerable saving in railroad fare can be effected by purchasing a "local" ticket as far as Washington and using mileage from that point to New Orleans.

Robert E. Rae, for many years with the Western Electric Company and for the last four years sales-manager for Stanley & Patterson, New York, has resigned from the last-named concern. Mr. Rae possesses a thorough knowledge of electrical merchandise, and has been specially successful as an organizer, having originated many time-saving methods in use throughout the country in leading jobbing houses. Mr. Rae's plans for the future are unsettled, but he will doubtless continue along selling lines or in organizing and executive work, for which his broad and successful experience in the electrical supply and manufacturing lines especially fits him. Mr. Rae is a Jovian and one of the original Telephone Pioneers of America.

The Tri-City Electric Company, Moline, Ill., of which W. J. Ball is manager, has moved its place of business to the New Service Building, 1412 Fifth Avenue, Moline. With increased space, more convenient arrangement of stock and larger display rooms, the company is now better able to serve customer's require-

ments in electrical merchandise, contracting fixtures, and repair work for the home, office or factory than ever before. An important department of the business is the winding and repairing of motors.

The Bryant Electric Company of Bridgeport, Conn., announces the appointment of George H. Williams, formerly New York representative of



The next time these boys peruse "The Monthly Magazine of the Electrical Trade" it will be "over there." They're members of the Roosevelt Hospital Unit, now in France. First Sergeant Bob Abbott, the top man in the group, was formerly in charge of the Bryant Electric Company's New York office

Gillinder & Sons Company, to take charge of its New York office, 51 East Forty-second Street. Mr. Williams takes the place of Robert Abbott, who, as a member of the Roosevelt Hospital Unit, is now "somewhere in France."

W. J. Longmore, connected with Westinghouse Electric & Manufacturing Company since 1881 and formerly the company's local purchasing agent at East Pittsburgh, has become general purchasing agent for



E. V. Freeman, who used to go gunning for industrial orders for the Charleston (W. Va.) office of "Westinghouse Electric," is now out at Fort Benjamin Harrison. And when you see him taking aim like this, at a Hohenzollern or an order—"Achtung, Kaiser Wilhelm, achtung!"

the company, with offices at Pittsburgh, where he will supervise purchases as a whole, and directing in particular those involving contracts for material used in electric works and shops. Charles G. Taylor, formerly assistant to Mr. Longmore at East Pittsburgh, is now purchasing agent for the works at East Pittsburgh, Shadyside, Cleveland and Newark.

George Cutter Company, South Bend, Ind., announces the appointment of R. W. Ten Broeck and A. B. Sonneborn as sales representatives for the State of Michigan. They have established offices at 426 Ford Building, Detroit, Mich. Mr. Ten Broeck was associated with the Packard Motor Company for a number of years, was later with the Davis Slate & Manufacturing Company, and for the past two years has been with the Mutual Electric & Machine Company of Detroit. Mr. Sonneborn was connected with the latter company for three years and during the last year was district representative of the Detroit Electric Welder Company of Lansing, Mich., with offices in Detroit.

R. C. Moran, who has been selling motors for the General Electric Company from its St. Louis office and who recently resigned to enlist in Barnes Hospital Unit No. 31 for service on the Eastern front, is safely landed "somewhere in France," so his friends are advised in a letter which was received in St. Louis the other day.

The Sangamo Electric Company has announced the opening of a Chicago district office in the Old Colony Building, in charge of C. H. Hurzt as district manager. For several years past the Sangamo Company has had a Chicago representative located with the Electric Appliance Company, for many years selling agents for the Sangamo Electric Company throughout the Middle West. In establishing this new office the Sangamo Company has made no change in the selling arrangements which it has had for many years with the Electric Appliance Company and the Federal Sign System (Electric) of Chicago, which will continue to handle Sangamo products as in the past. A completely equipped repair department will be maintained as heretofore, under the management of the Chicago office.

